CA20N EU 309

108

Technical Report Series

Historical
Literature Review
of the
NipigonArea
with Emphasis
on Fisheries
from
1654 to 1990

Technical Report #8 Nipigon Bay



NORTH SHORE
OF LAKE SUPERIOR
REMEDIAL ACTION PLANS



Copyright Provisions and Restrictions on Copying:

This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at copyright@ontario.ca

NORTH SHORE OF LAKE SUPERIOR REMEDIAL ACTION PLAN TECHNICAL REPORT SERIES

Report No.

- 1. Beak Consultants Limited. 1987. Survey of the Benthos of the Lower Kaministikwia River, 1985. Prepared on behalf of the Ministry of the Environment. 114 pp.
- Cullis, K., W. T. Momot, and R. Sein. 1987. Kaministiquia River Study, 1987. Ministry of Natural Resources. 148 pp.
- 3. Beak Consultants Limited. 1988. Benthic Community Evaluation of Jackfish Bay, Lake Superior, 1969, 1975, 1987. Prepared on behalf of the Ministry of the Environment. 208 pp.
- 4. Pugh, D. 1989. A Benthos and Substrate Quality Survey of Thunder Bay Harbour in the Vicinity of Northern Wood Preservers, 1972 and 1986. Ministry of the Environment. 39 pp.
- 5. Irwin, G.S. 1989. Bacterial Study of Chippewa Beach -Thunder Bay, Ontario, 1988. Ministry of the Environment. 40 pp.
- 6. MacCallum, M. E. 1989. The Nipigon River: A Retrospective Summary of Information about the Fish Community. Prepared on behalf of the Ministry of Natural Resources. 83 pp.
- 7. Jardine, C.G. and K.J. Simpson. 1990. Water and Sediment Quality Assessment of Peninsula Harbour, Lake Superior -Spring 1984 and 1985. Ministry of the Environment. 96 pp + Appendices.
- 8. Wilson, L. 1990. Historical Literature Review of the Nipigon Area with Emphasis on Fisheries from 1959 1990. Ministry of Natural Resources. 178 pp.
- Wilson, L. 1991. Nipigon Walleye Historical Review. Ministry of Natural Resources. 94
 pp.
- 10. Sibley, P.K., D.R. Barton and D.G. Dixon. 1991. A Twenty Year Survey of the Benthic Community at Peninsula Harbour, Lake Superior (1969 1989). Prepared on behalf of the Ministry of the Environment. 160 pp.

HISTORICAL
LITERATURE REVIEW
OF THE
NIPIGON AREA
WITH EMPHASIS
ON FISHERIES
FROM 1654 TO 1990

Compiled by:

Leona Wilson Ministry of Natural Resources Department of Fisheries and Oceans

June 1990

ISBN: 0-7729-8628-2

TABLE OF CONTENTS

	PAGE
Summary	i
Introduction	ii
List of Tables	iv
List of Figures	v
List of Appendices	vi
Citations	1
Discussion	131
Poforonces	133

Summary

This review was conducted as part of an effort to rehabilitate declining fish populations in the Nipigon Area. In order to begin a rehabilitation program the historical factors affecting the fisheries must be determined.

An annotated bibligraphy comprising a total of over 400 citations was prepared. Numerous sources were investigated in this process. Major references are:

- 1) Ontario Game and Fisheries Reports
- 2) Hydro Electric Power Commission Reports
- 3) Studies of the University of Toronto
- 4) Diaries and Journals of previous visitors and inhabitants of the area
- 5) "The Nipigon River; A Retrospective Summary of Information about the Fish Community" by Mary Ellen MacCallum
- 6) Ontario Ministry of Natural Resources files

Other specific sources are listed in the references section at the end of this report. Included in the Appendices are:

- a glacial history of the Nipigon basin
- an archaeological history of the Nipigon area
- a summary of the winning Lake Nipigon and Nipigon River brook trout entries in the Molson Big Fish Contest and some early entries to the Field and Stream Annual Fishing Contest
- 4) a summary of O.M.N.R. brook trout spawn-taking operations on Lake Nipigon, 1923 to 1984.
- 5) a summary of brook trout stocked in Lake Nipigon since 1928.

INTRODUCTION

This report is presented in chronological order beginning with the fur trade era and ending with the most current information available. It emphasizes the fisheries of the Nipigon area but it also includes some aspects of the wildlife, the economics, the resources, and the people that inhabit it.

The major events particularly affecting the region include the fur trade, railway construction, hydro- electric development, pulp and paper industry, and tourism as well as commercial and sport fishing.

The native Indians utilized the Nipigon River system as both a means of subsistence and of transportation. Their diet relied largely on the abundant fishes present. Europeans arrived in approximately 1658 signifying the beginning of the fur trade. This resulted in extensive exploration and mapping in the area. Many posts were built on the shores of Lake Nipigon and on the banks of the Nipigon River. Tourism and sport fishing on the Nipigon River has been documented back to the 1800's when it was renowned as containing the largest speckled trout in the world. Transportation at this time was via a steamer on Lake Superior but this was soon to change with the construction of the Canadian Pacific Railway bridge across Lake Nipigon. This new accessibility resulted in an increased population and an increased number of structures such as bridges, access roads and stations. The power potential of the falls and rapids on the Nipigon River (a drop of 313 feet in 30 miles) did not go unnoticed. In 1920 the first dam was built at Cameron Falls. 1930 Alexander Falls generating station was built followed by the Pine Portage station in 1950. The last dam flooded all the rapids upstream to Virgin Falls including Rabbit Rapids where the world record brook trout was caught in 1915. Effects produced by these dams include: erosion, siltation, habitat degradation, and flooding. The dams also limit the migration of certain species while preventing the invasion of others into Lake Nipigon from Lake Superior.

The logging industry made its presence known in 1923 when it began drives down the Nipigon River. Fifty years of log driving on Lake Nipigon and its tributaries resulted in the accumulation of woody debris on many fish spawning beds. The log booms also raised the water levels and provided cover for many species. The effluent released by the pulp and paper industry on Nipigon Bay has been suggested as at least a partial cause for the drastic decline of walleye in the 1960's. The decline is also contributed to overfishing.

Commercial fishing began on Lake Nipigon in 1917 and continues today. The fisheries are monitored by the Lake Nipigon Assessment Unit of the Ministry of Natural Resources and fishermen are regulated using a quota system. Sport fishing in the area has increased in popularity on both the Lake and River. Sport fishing permits were used on the Nipigon River system in the early 1900's to preserve the fish population, particularly the brook trout.

Another factor affecting the success of the brook trout is the presence of new competitors. The rainbow trout and the pacific salmon are found on the same spawning beds as the brook trout and they may also utilize the same food source. To what extent the niches overlap must be determined.

A lot of brook trout stocking in 1916-1950 in the Nipigon River and tributaries to Lake Superior may have provided an artificially high quality of fishing during those years.

Many reasons presented in this report may be partially responsible for the decline of the brook trout. Delving into the historical background of this area may give some insight into the rehabilitation of this fish.

LIST OF TABLES

			PAGE
Table	1	Locations of fur trade posts in the Lake Nipigon area.	5
Table	2	Revenues from sales of sport fishing permits on the Nipigon River system from 1900 to 1915.	28
Table	3	Stocking data for the Nipigon River; 1921-1988.	49
Table	4	Hydro-electric development of the Nipigon River.	73
Table	5	Species composition of seine net, trapnet and gillnet in the Nipigon River; 1986 and 1987.	118
Table	6	Fish species collected in the lower Nipigon River; 1986 and 1987.	119
Table	7a	Creel survey summary of the lower Nipigon River, July 21 to November 1, 1988.	120
Table	7b	Creel survey summary at Pine Portage, July 21 to September 15, 1988.	120
Table	7c	Creel survey summary: lower Nipigon River, September 1 to November 1, 1987.	120

		LIST OF FIGURES	PAGE
Figure	1	Locations of fur trade posts in the Lake Nipigon area.	6
Figure	2a	Map of the Lake Nipigon region from Nipigon Bay to Lake Maria. This map is taken from Robert Bell's Geological Survey conducted in 1869.	13
Figure	2b	Map of the Lake Nipigon region from Lake Maria to the south end of Lake Nipigon. This map is taken from Robert Bell's Geological Survey conducted in 1869.	14
Figure	3	Map illustrating railways in the Nipigon region and the Nipigon Tramway.	34
Figure	4	The rare photo taken by Mr. A. J. Isbester, Chief Engineer for the Canadian Northern Ontario Railway, shows the freighting operation as carried out up the Nipigon River. The steam driven "NIPIGON" is hauling the barge loaded with narrow gauge flat cars, they in turn are loaded with construction materials for the building of the CNOR.	35
Figure	5a	The transportation of rails for the construction of the National Transcontinental Railway in 1908 on Lake Nipigon, this time without the narrow gauge flat cars.	36
Figure	5b	Marion Steam Shovel "model 60" as used by E.F. and G.E. Faquier contractors on the construction of the National Transcontinental Railway in the Nipigon region.	L 36
Figure	6	Map of the Nipigon River as found in the brochure for the Nipigon River Bungalow Camp.	54
Figure	: 7	Map revised from the brochure of the Nipigon River Bungalow camp (1920-1930) showing fishing pools, camping places and points of interest in 1921.	55
Figure	8	Map illustrating the Hydro-electric Power Commission generating stations on the	74

LIST OF FIGURES	(Contrd)	PAGE
Figure 9	Map showing the Nipigon River in 1977.	106
Figure 10	Map of aquatic habitat inventory below Lake Helen.	129
Figure 11	Map of spawning habitat inventory between Alexander Falls and Lake Helen.	130
	LIST OF APPENDICES	
Appendix 1	A glacial history of the Nipigon River basin.	146
Appendix 2	An archaeological history of the Nipigon area.	153
Appendix 3	A summary of the winning Lake Nipigon and Nipigon River brook trout entries from the Molson Big Fish Contest and some early entries to the Field and Stream Annual Fishing Contest.	154
Appendix 4	Summary of O.M.N.R. brook trout spawn- taking operations on Lake Nipigon, 1923 to present.	164
Appendix 5	Summary of brook trout stocked in Lake Nipigon since 1928.	165
Appendix 6	A chronological review of stresses affecting the fisheries of Nipigon Bay, Lake Superior.	167

CITATIONS

- 'coureurs de bois' had come to trade with the Nipissing tribe of Lake Nipigon or the tribe may have brought their furs to New France; either way people in New France were familiar with Lake Nipigon
- from then on, the area around Lake Nipigon became the most profitable fur-bearing district along the northshore of Lake Superior

J. P. Bertrand, 1959

- on May 15, 1656, the Governor of New France, Jean de Lauzon, granted a trading concession to Sieur Zacharie Dupuy, a coloniel officer. This exclusive privilege extended from "the Gulf of St. Lawrence, always following the same point of the compass and extending beyond Lake Superior, proceeding from Lac des Alepinigons (Nipigon), without any interruption to the navigation".

1659

T. F. Waters, 1987

 there is some speculation that Radisson and Des Groseilliers visited James Bay, through the Nipigon River - Albany River route, but the time element argues against it

1660

R. Griffith, 1972

- the next indication that the Nipigon route was used was in 1660 when Radisson and Groseilliers allegedly used the canoe route from Lake Superior through Lake Nipigon to James Bay
- their apparent knowledge of the James Bay area indicates they did make the trip, and because they went a different route than they came back on, both ways through Cree country, it seems they did go through Lake Nipigon

1662

Wilson, 1910

- Radisson and Groseiliers established an overland route to James Bay but it is not certain by what route the two traders took
- many of the early maps show a supposed connection between Lakes Nipigon and Winnipeg and do not indicate the more western route via the Lake of the Woods
- There is a good canoe route northward from Lake Nipigon to Lake St. Joseph, and thence by Lac Seul, the English River, and the Winnipeg River to Lake Winnipeg, there is a possibility that this is the route followed by Radisson and Groseillers

- a Jesuit Priest, Father Allouez, also used these canoe routes

J. P. Bertrand, 1962

- Allouez came up to the Nipigon district to minister to a band of Nipissing Indians, who had fled from their abode along Lake Nipissing from the fury of the Iroquois who had practically destroyed the Huron villages, and the Jesuit Missions during 1648 and 1649.

> Ontario Ministry of Natural Resources, 1980

- Edward Umfreville had been appointed by the Northwest Company to find a new canoe route from Lake Superior to the Winnipeg River
- they ascended the Nipigon River and directed their course towards Wabinosh Bay, then up the river to Lake Wabinosh and from thence travelled to Sturgeon Lake, from thence travelled to Minnitaki Lake and thence to Lac Seul and the Winnipeg River
- the partners of the company believed that Umfreville had exaggerated the possibility of the new route

1670-1820

- Lake Nipigon was a centre of an unsettled boundary dispute between England and France during the fur trade
- prior to 1670, all furs went to France via Montreal

1670

 Hudson's Bay Company was granted a monopoly charter over the fur trade by the English throne

1671 Wilson, 1910

 Lake Nipigon first appears on the Jesuit Relations map of 1671, being represented but not named

1672 T. F. Waters, 1987

 the travels of Claude Jean Allouez contributed to the famous "Lake Superior Map" prepared by Allouez and Father Claude Dablon, published in the Jesuit Relations of 1672

Norshore Sentinel Thursday, July 12, 1962

- "after accomplishing a good part of our journey on the lake (Superior) we left it on the 25th of this month of May and consigned ourselves to a river, so full of rapids and falls that even our savages could go no farther; and learning that Lake Alimibegong (Nipigon) was still frozen over they gladly took the 2 days rest imposed upon by necessity". Allouez

1676

Ontario Ministry of Natural Resources, 1980

- the furs were being diverted to the English post on James Bay rather than the French post in Montreal
- rivers used to reach the Albany from Lake Nipigon were Wabinosh, Pikitigushi, Jackfish, Ombabika, Onaman, Namewaminikan

1679

T. F. Waters, 1987

- the Greysolon brothers (Daniel was Sieur du Lhut and Claude was Sieur de la Tourette) tried to intercept Indians trading from Lake Superior to Hudson's Bay where the English were located
- a post was built near the mouth of the Nipigon River and called Fort Nipigon, or Fort la Tourette
- they also erected a fort on the mouth of the Kaministiquia

1680

Wilson, 1910

- Lake Nipigon is named for the first time as "Lac Alimibig" and the people inhabiting the country are called "Ouanaouantagouk"

1683

T.F. Waters, 1987

- explorer Sieur du Lhut, after his visit in 1683, probably borrowing from the Ojibway, called it Lake Alemipigon
- this name can be interpreted loosely as "water you cross to get somewhere else"

1684

Dawson, 1969

- there was believed to be a French fur trading post at the mouth of the Ombabika river
- named Fort La Maune or La Tourette or "Dulhut"
- estimated to exist from 1684 to 1750
- there was also believed to be a French fur trading post at the mouth of the Pikitigushi River named Fort Outoulibis
- estimated to exist from 1684

Ontario Ministry of Natural Resources, 1980

- Fort La Maune was constructed under the supervision of Charles Dulhut in reaction to the French loss of furs to the English
- this fort was designed to completely block the traffic going into the Hudson's Bay Company post at the mouth of the Albany River on James Bay

1695

Wilson, 1910

- Robert Morden's "A new Map of the English Empire in America" shows Lake Superior and Lake Nipigon, but does not name the latter.
- "Fort Duluth" is shown at the northeast corner of Lake Nipigon

1703

- Lahontan shows "Nemipigon" on a general map of New France

1731

J.P. Bertrand, 1959

- from 1731 to 1801, the fur trade travel had been diverted from the "Kaministiquia River, Dog Lake, Lac des Mille Lacs route" to the "Grand portage - Pigeon River Highway" to Lac la Croix

1717

Dawson, 1969

- there was a fur trading post named Fort Ste. Anne believed to be on the south shore of Lake Helen
- existing from 1717 to 1775

1722

Wilson, 1910

- Guillaume de I'Isle, in his "Carte d'Amérique" calls the Lake "Lac Nepigon"

1726

T. F. Waters, 1987

- Sieur de la Vèrendrye was on Lake Nipigon, commanding Fort à la Maune at the mouth of the Ombabika River

Table 1. Locations of fur trade posts in the Lake Nipigon area.

Post	Company	Believed Location	Estimate Dates of Existence
Fort La Maune or La Tourette or "Dulhut"	French	Mouth of Ombabika River	1684 - 1750
Fort Outoulibis	French	Mouth of Pikitigushi River	1684 - ?
Fort Ste. Anne	French	South shore of Lake Helen	1717 - 1775
Champlain Point Post	French	West shore of Lake Nipigon	Prior to 1784
Rocky Island	French	Rocky Island	Prior to 1784
Shaws Post	Independent	Mouth of the Ombabika River	1788
Fort Nipigon	H.B.C.	Mouth of the Ombabika River	1792 - 1821
Nipigon River House	N.W.C.	Mouth of the Nipigon River	1785 - 1821
Fort Duncan	N.W.C.	Wabinosh Bay or Windigo Bay	1795 - 1821
Red Rock House	H.B.C.	Mouth of the Nipigon River	1859 - 1902
Southwest Shore House	N.W.C.	McIntyre Bay	1800 - ?
Wabinosh House	H.B.C.	Wabinosh Bay	1821 - 1850
Nipigon House	H.B.C.	Opposite Jackfish Island	1850 - 1937
(also Wabinosh House)			1000
Clark's Post	Independent	Mouth of Nipigon River	1860
Poplar Lodge Post	H.B.C.	Mouth of Namewaminikan River	1825 - 1880
Jackfish Post	Revillion Freres	Mouth of the Jackfish River	1905 - 1916
Nipigon Post	Revillion Freres	Mouth of the Nipigon River	1905 - 1916
Windigo Bay	H.B.C.	Mt. St. John	1884
Mud River	H.B.C.	Pikitigushi River mouth	1890
Wabinosh River	H.B.C.	Wabinosh River mouth	1895
Mckurdy's	Independent	Nipigon River	1888
Sand Point	H.B.C.	Mouth of Pijitawabik Bay	1890 - 1924
Grand Bay	H.B.C.	Grand or McIntyre Bay	1890 - 1924
Bay View	H.B.C.	Orient Bay	1890
Nipigon Store	H.B.C.	Nipigon River	1895 - present
Nipigon House	H.B.C.	Gull Bay	1937 - present

^{*} H.B.C. = Hudson's Bay Company

^{**} N.W.C. = North West Company

Figure 1. Locations of Fur Trade Posts in the Lake
Nipigon area.
Source: Dawson, 1969

Jackfish R Pikitigushi R Rock Island Late Revillon Frères 1905 Ft Hipigon 1785 Early Franch Post Whitesand R Windige Bay Pest HBC Windigo Say Lamaune Cr Lota HBC 1788 Ombabika A. HBC 1792 Ft Latourette of LaMaune 1684 (Ft Dwinth) Ft Duncan NWC 1795 Wabinosh Bay Late HBC English Bay Humbolt Bay Hipigon House 1838 Oneman River East Bay Lake HBC 1937 Nipigon Gull Boom Early French Post Champlain Point Sturgeon R 3 Popier Pt Lodge HBC 1825 Grand Bay HBC 1890 Macintyre Bay Late HBC Sand Pt 1890-1924 South Bay 00 HWC 1800 HBC 1890 Bayview (Cove Inlet) Winter Road Polly Lake HEC 1890 Other Locations of Fort Duluth @ Lake Helen HWC 1785 Ft St Anne 1717
HBC Store 1895 GRevillon Fraces 1905
HBC(Red Rock) 1859 Clerks Post 1860 Nipigon Bay

1

- the Seven Years War was raging in Europe while Louis Menard and his crew of voyageurs and Indians ascended the Nipigon River; they crossed Lake Nipigon and went on up to the Albany River

1763

Ontario Ministry of Natural Resources, 1980

 the Treaty of Paris was signed whereby England gained control over France's territory in North America

1768

 the English governor could not control the persistent French fur traders so control over the trade was given up

Mountain, 1974

 from 1770 to 1780, the canoe traffic transporting traders and trade goods increased along the north shore

 assorted north shore travellers included french and english speaking fur traders, Jesuit missionaries, nineteenth century scientific-exploratory based expeditions, as well as several British Canadian and U. S. survey teams

1777

Wilson, 1910

- Thomas Geffreys in his "Carte Nouvelle des Possessions Angloises en Amérique" uses the spelling "Nipigon" for the first time
- he indicates the Nipigon River as River de Alempissaki

1779

Ontario Ministry of Natural Resources, 1980

 Montreal traders banded together forming the Northwest Company which became the Hudson's Bay Company's fiercest competitor

Prior to 1784

Dawson, 1969

- there was a French fur trading post (Champlain Point Post) believed to be on West shore of Lake Nipigon
- also a french fur trading post located on Rocky Island Lake which is northwest from Lake Nipigon

Edward Umfreville, 1784

- Edward Umfreville's guide stated that sturgeon were plentiful in Lake Helen
- the only forts mentioned are the Old French houses on the west side of the lake (Fort Nippigon)

1785

Dawson, 1969

- A North West Company trade post (Nipigon River House) was believed to be located at the mouth of Nipigon River
- estimated existence was 1785 to 1821

1788

 independent fur trade post (Shaw's Post) believed to be located at the mouth of the Ombabika River

1792

- Hudson's Bay Company post (Fort Nipigon) at the mouth of the Ombabika River
- estimated existence was 1792 to 1821
- this was the Hudson's Bay Company's first post on Lake Nipigon; it was constructed by John McKay

1795

- North West Company post (Fort Duncan) believed to be located at Wabinosh Bay or Windigo Bay
- estimated existence 1795 to 1821

1797

Nipigon Gazette June 24, 1981

- the ice did not go out of Lake Nipigon until June 24

1800

Dawson, 1969

- North West Company trade post (Southwest Shore Post) believed to be on McIntyre Bay
- estimated existence from 1800

1821

- A Hudson's Bay Company trade post (Wabinosh House) was located on Wabinosh Bay
- estimated existence 1821 to 1850

Ontario Ministry of Natural Resources, 1980

- the end of a 150 year old fur trading rivalry was brought about with the Hudson's Bay Company forcing an amalgamation with the Northwest Company

T. F. Waters, 1987

- eleven active fur trading posts on Lake Nipigon

- the route to James Bay was up the Little Jackfish River, portage over the Superior - Hudson's Bay watershed to the Ogoki River system, tributary to the Albany river, and thence down the Albany to James Bay

- this route was the scene of major conflict between the Hudson's Bay Company and the French in their competition for the Indians' wilderness harvests

the indians wilderness harvests

1825

Dawson, 1969

- A Hudson's Bay Company trade post (Poplar Lodge Post) located at the mouth of the Namewaminikan (Sturgeon) River

- existed from 1825 to 1880

1848

Louis Agassiz, 1850

- Professor Agassiz visited Nipigon Bay on his voyage around Lake Superior
- the water had been stirred near the islands by a recent storm, and he understood that "Nipigon" meant "dirty water"

Hartviksen and Momot, 1989

- first record of brook trout in the Thunder Bay area was in Black Bay on Lake Superior
- this was noted by Louis Agassiz

1850

Dawson, 1969

- A Hudson's Bay Company post (Nipigon House or Wabinosh House) located opposite Jackfish Island
- the previous Wabinosh House on Wabinosh Bay existed from 1821 to 1850
- Nipigon House existed from 1850 to 1937
- Robert Bell reports a Hudson's Bay Company farm here between 1866 to 1869

 in 1850, the Ojibway of Canada signed away their portion of the North Shore, except for three small reserves near Fort William, Lake Nipigon, and Michipicoten, in Canada's Robinson - Superior Treaty

1859

Dawson, 1969

- A Hudson's Bay Company post (Red Rock House) located at the mouth of Nipigon River
- estimated dates of existence 1859 1903

Hamilton and Brigham, 1986

- Red Rock house was constructed in 1859 as an outpost of Nipigon House to offer competition to traders moving northwest across Lake Superior from the United States
- initially the post consisted of 2 or 3 log buildings and probably was not occupied year-round
- as steam ship transportation became more firmly established on Lake Superior, Red Rock House became increasingly important as a cargo trans-shipment point
- goods were shipped to Red Rock House by steam boat to be redistributed northward throughout the Lake Nipigon hinterland via canoes and batteaux
- archaeological investigations from 1982 to 1985 revealed evidence of the remains of Red Rock House
- this post was the first to be archaeologically confirmed on this site which is presently located within the town of Nipigon

1860

Dawson, 1969

 an independent fur trade post at the mouth of the Nipigon River was named Clark's Post

Lawrie and Rahrer, 1973

 from 1860 to 1920, the exploitation of forests by pioneering lumber companies, greatly increased the flow of both dissolved and particulate matter to Lake Superior

1863

Thunder Bay Museum Nipigon File

- "Steamboats are now running on Lake Superior on a regular basis. Goods are now being brought to Red Rock from Sault Ste. Marie and Port Arthur on a scheduled basis. This changes the distribution pattern and makes cheaper the delivery and goods cost."

Hon. R.B. Roosevelt cited by W.F.Whitcher, 1988

- "of the rivers, the most famous is the Nipigon, where barrels of trout, averaging 4 pounds have been taken in one dayThey were collected in pools and were so numerous as to ruin the sport"

1867

Ontario Ministy of Natural Resources, 1987

- with Confederation, the British North American Act, brought "all matters of a local or private nature", including wildlife, under provincial legislation; the federal government was given jurisdiction over fisheries, however

Campbell, 1971

- William Armstrong was an artist and a civil engineer that acccompanied survey crews on their exploration of the Great Lakes
- when Armstrong went to Nipigon as a member of government survey parties in 1867 and 1869, only the Hudson's Bay Company agents, who ran a trading post there, and local Indians really knew the region and the drawings done by Armstrong were to make the country better known

1869

W.F. Whitcher, 1888

- an unofficial reporting of a 19 pound speckled trout in Nipigon Bay
- this fish was said to be caught by a member of one of the early survey parties

1870-1880

Hamilton & Brigham, 1986

- Red Rock House was at the height of its growth
- an important outfitting station for "gentlemen anglers" who visited the Nipigon River to enjoy the renowned sport fishing of the area
- officer in charge of the post also acted as the Post Office Master, and as the Fishing Inspector who was responsible for issuing fishing licences

Robert Bell, 1870

- Hudson's Bay Company post (Red Rock House) was present at the head of the Nipigon Harbour while Robert Bell was conducting his geological survey
- Robert Crawford was the chief trader of the Red Rock House - "this survey included the survey of Lake Nipigon and portions of several of the rivers flowing into it, the obtaining of approximate levels along the Nipigon River, besides an examination of much of the country near Lake Nipigon"

1870

Campbell, 1971

- the steamer 'Algoma', sister ship of the 'Chicora', was transporting troops past Thunder Cape on the Red River expedition, May, 1870
- these troops surmmounted numerous barriers in order to subdue Louis Riel and his followers at Fort Garry

Figure 2a. Map of the Lake Nipigon Region from Nipigon Bay to Lake Maria. Taken from Robert Bell's Geological Survey conducted in 1869. 4 miles = 1 inch.

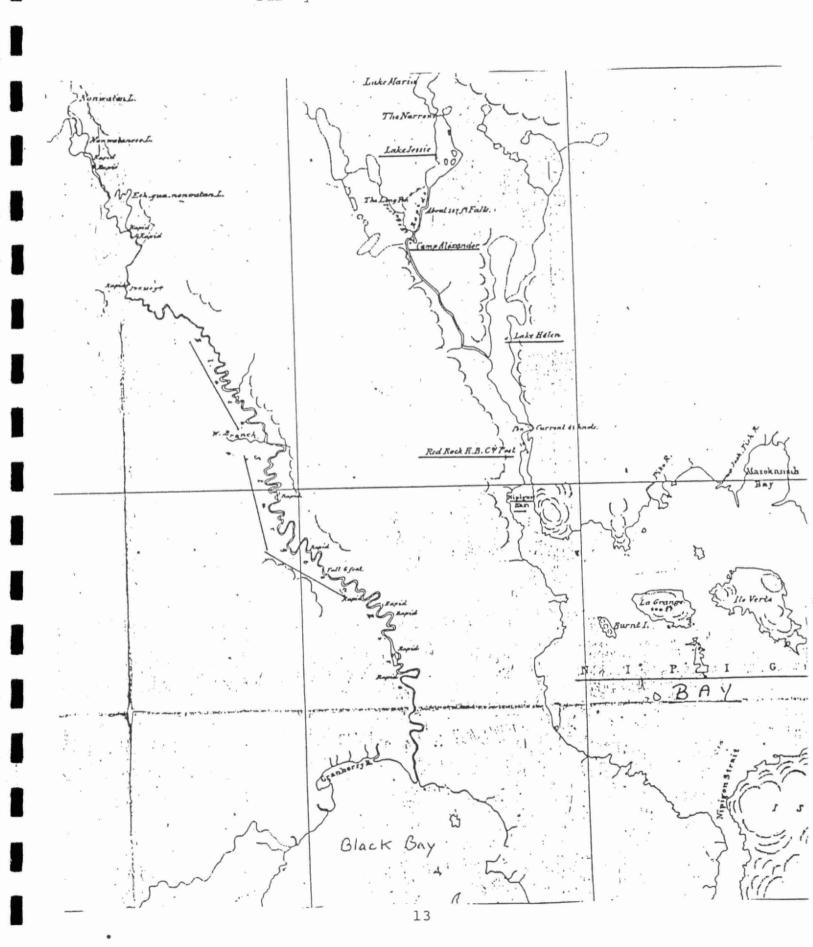
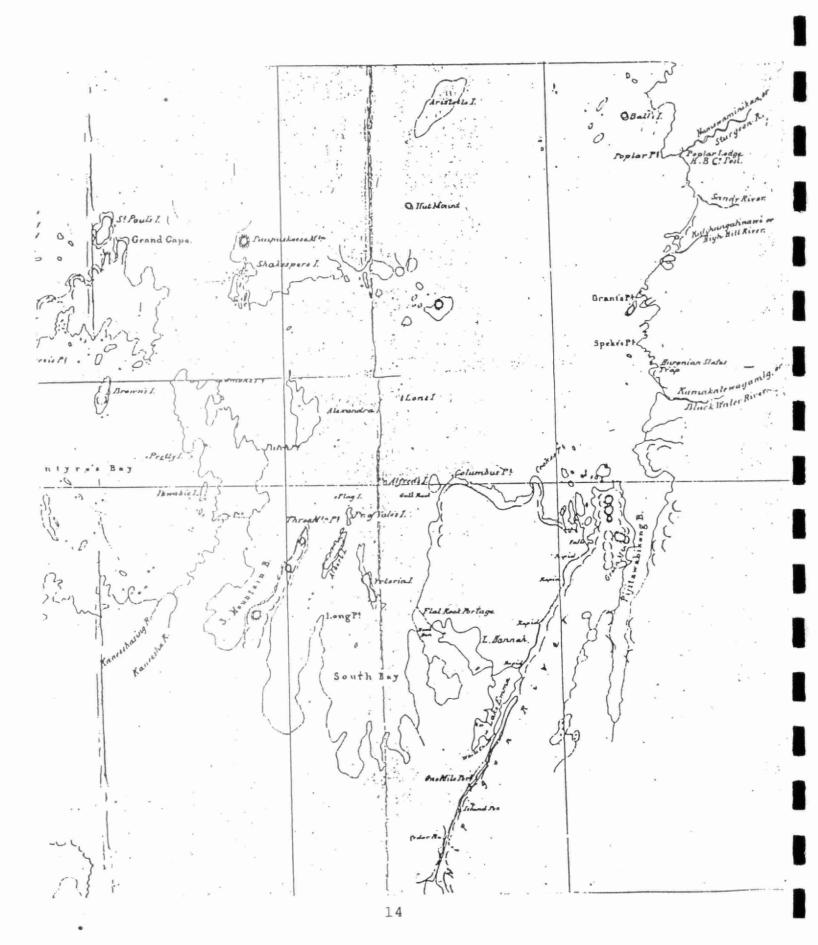


Figure 2b. Map of the Lake Nipigon Region from Lake Maria to the south end of Lake Nipigon. Taken from Robert Bell's Geological Survey in 1869.



The following list shows approximately the levels in ascending the river, and the height of Lake Nipigon above Lake Superior

	Feet
Current between Red Rock and Lake Helen	2
Current in river from Lake Helen to Camp Alexander, six miles, at one <u>foot</u> per mile	6
Chute to Camp Alexander	4
From the (last) to base of Long Portage by way of Portage Brook	8
Rapids at Long Portage	137
Current in The Narrows, between Lakes Jessie and Maria	15
Current from last lake to Cedar portage	1
Cedar Chute	10
Current from Cedar Chute to Island Chute	7
Island Chute	7
Current from Island to One-Mile Portage	2
Rapids at One-Mile Portage	45
Current from One-Mile Portage to White Chute	1
White Chute	6
Current in brook between Lake's Emma & Hanna	1
Rise from last Lake to Lake Nipigon (Flat Rock Portage)	815
Lake Nipigon above Lake Superior	313

Robert Bell, 1870

- Nipigon is a contraction of an Indian word signifying "deep clear-water lake"
- many years ago, according to Indians, a small quantity of the water escaped into Black Sturgeon Lake
- presently, L. Nipigon is drained by its only outlet the Nipigon River

- Lake Nipigon was found to be very deep

- "William Armstrong of Toronto, who visited L. Nipigon in 1867, states that close to Echo Rock, a line 540' long was lowered without reaching the bottom'
- Echo Rock is near Nipigon House opposite Jackfish Island
- Poplar Lodge also present during this time where Robert Bell called upon Henry De La Ronde
- around Lake Nipigon the materials of the drift have also evidently travelled westward - perhaps resulting in blockage of a previous outflow down Black Sturgeon River
- noted trees around Lake Nipigon principally white spruce, white birch, aspen and poplar, balsam - fir, tamarac, white cedar, occasional trees of black ash, grey elm, red and white pine

1872

Buzz Lein, 1972

- W. Flanagan was in charge on Red Rock Trading Post of the Hudson's Bay Company
- T.L. Morris visits Nipigon in July 1872 to go fishing at Camp Alexander
- in 48 hours he caught 108 speckled trout that weighed more than $1\frac{1}{2}$ pounds each, at least half were greater than 4 pounds each
- 50¢/day canoe rental
- \$1.50/day for each guide and board for each
- "the whole deal from portal to portal probably didn't cost Morris more than \$15.00"
- Morris considered the Nipigon River to have "better speckled trout fishing than there is anywhere"

1873

Charles Hallock cited by W.F. Whitcher, 1888

- "at the first rapids, within sight of the steamboat landing, (at the Hudson's Bay Company post, Red Rock) he remarks, "one may tarry and fish to repletion of desire and basket without going further"
- 150 fish caught with an average weight of 2½ pounds
- small fish are scarce

- their fishing record is as follows:

5 fish = 18 pounds

5 fish = 20 pounds

5 fish = 23 pounds

6 fish = 22½ pounds

1874

Lady Dufferin cited by Buzz Lein, 1972

- on August 3rd the sidewheeler "Chicora" splashed up to the Hudson's Bay dock bringing the Governor General of Canada (Lord and Lady Dufferin)
- they were visiting Nipigon because it was famous worldwide for its fishing
- they stopped overnight at Camp Alexander which was on the east bank just below Alexander Falls (the falls has been eliminated by Hydro-Electric Development)

1876

Buzz Lein, 1972

- this information was extracted from report by Alexander Walpole Roland
- he found the ducks, geese, partridge plentiful
- the fishing was successful in number and catch
- average weight of the speckled trout about 2 pounds
- the "Manitoba" was the last steamer of the season, the next one was due in 7 months time
- Campbell's line of steamers stopped regularly in Nipigon
- "The tourist can disembark here, and for a small sum hire an Indian guide and a birch bark canoe and paddle up the river where brook trout can be caught in numbers. Probably no stream in the world can boast of clearer water than the Nipigon, meaning 'deep clear water lake'."

1880

Boon, 1963

- When the Rev. Robert Renison served at the Anglican mission on Lake Nipigon in the 1880's he faced the same situation that his son, the future Bishop, described: "I entered a land of yesterday. The twilight of the Romance of the Hudson's Bay Company still hovered over Ontario's back door. The Dominion government sent down occasional surveyors. The Indians were left alone... There were only two outside interests, the old Company that came for fur, and the Missionaries who remembered that Indians had souls."

Buzz Lein, 1973

- junior Chief Trader Flanagan reports, "A good many people, nearly all americans, are at present up the River (Nipigon) here angling and meeting with splendid success....I am very glad to see that the Indians about here are given employment at a time when they cannot hunt"

Renison, 1957

 Reverend Robert Renison took charge of the Indian Mission at the south end of McIntyre Bay, Lake Nipigon in the spring 1881

1883

H. H. Vail, 1884

- Mr. H. H. Vail of Cincinnati visited Nipigon for a fishing trip
- "the lake (Nipigon) is fed by 12 small rivers each with an unpronounceable name as long as itself"
- the Vail party started fishing at the fast water under the present railway bridge then up to the fast water where the Canadian National Railway bridge is now

- 64 pounds of trout were caught in one day

- Camp Cincinnati was located on the east bank, about one mile below Pine Portage where one angler caught 56 pounds of trout, all surplus fish were released unharmed
- Virgin Falls was their last stop where they caught 13 specks weighing a total of 55½ pounds

- the lake trouts average weight was 8 pounds

- there were black bass in vicinity of Alexander Falls

"with such abundant ever flowing water so stocked with game fish and their prey, there is not the slightest danger that the fishing in this river will be spoiled so long as the bites of mosquitoes, sand flies, and blackflies are painful to men"

Goodier, 1982

- brown trout plantings in American and Canadian waters

1883-1885

Hamilton & Brigham, 1986

- Red Rock House became headquarters for Hudson Bay Company's Lake Superior District for a short while
- construction of Canadian Pacific railway across the north shore of Lake Superior began
- this transportation system would gradually replace the increasingly unreliable steam ship system

- larger ships were docking some distance down from Red Rock House
- construction of Canadian Pacific Railway accelerated development of Euro-Canadian settlement producing the town of Nipigon

H. H. Vail, 1884

inquiring about the name Nipigon, Vail was told by the Indians that it was a "white man's name" but that the original name meant "water with many channels"

"the Hudson Bay employees do not follow the river (Nipigon) to the lake; they cut across through Lake Hannah, and carry over a low divide a mile wide to the south shore of Lake Nipigon"

Dawson, 1969

- Hudson's Bay Company Post at Windigo Bay on Mt. St. John

Mountain, 1974

 by October 1884, 67 miles of track had been laid east of Port Arthur, with 254 miles of the north shore section remaining to be built as of December of that year

- the Superior section was completed by fall of 1885

Van Horne, 1884

- The following excerpt is taken from the Van Horne Letter Books, v. 8, pp. 201-4 found in the Public Archives Canada, MG 28 III-20
- Van Horne to John Ross, Montreal, October 19, 1884; regarding the construction of the C.P.R.
- "More than twice as much was expended in masonry on the Port Arthur and Nipigon section than on all the rest of the work together and this has contributed largely to our financial difficulties...My object in writing this is to impress upon you the absolute necessity of cutting every corner to save money on the work remaining to be done. We have not one dollar to spare for any work that can possibly be avoided or postponed even for a year.

The consequences of failure to complete the work inside of the government loan would be disastrous.

The money saved on the Mountain Section is being rapidly absorbed by the Lake Superior section and we are again very near the danger line."

Norshore Sentinel, 1885

- marble and granite quarries being explored in Nipigon Bay

Ontario Ministry of Natural Resources, 1987

- The Ontario Fisheries Act was assented to in government

John Todd, 1977

- Canadian Pacific Railway bridge across the Nipigon River was built and the community would soon be linked to the rest of the country
- likely disturbed the river bottom during construction

1887

H. W. Slack, 1887

- Hiram Worchester Slack read an article in Field and Stream in 1887 naming the Nipigon River the finest trout stream in the world so he decided to visit
- his diary is titled "Journey Up The Nipigon River"
- at Camp Alexander, Hiram landed a 17 inch speckled trout with a girth of 8½ inches in the first half hour he fished
- in the rapids between Lake Emma and Lake Maria he took a small trout then a large one 19 inches long and 9½ inches in girth
- at Pine Portage the total catch weighed 50 pounds
- one eight pound lake trout was captured
- fare from Nipigon to Port Arthur on the freight train was \$5.40

Lady MacDonald cited by W.F. Whitcher, 1888

- "The only fault with trout fishing in the Nepigon (sic), I am told, is that the fish are too numerous, as if one could catch too many 4 pound trout"
- this quote was taken from an article titled "By Railroad and by Cowcatcher" published in Murray's Magazine in Feb. 1887.

1887

Arthur, 1973

- Newton Flanagan spent half a century as a Hudson's Bay Company employee before retiring in 1890. His first report from Red Rock concerning the Nipigon fisheries wwas made in 1887, by which time he was overseer for the Department of Fisheries, responsible for Lake Nipigon, the Nipigon River, and adjacent waters. In 1890, he was succeeded by William McKirdy. The salary in both cases was \$50 per year.

Notes from Newton Flanagan: "One hundred and two persons made applications for and received special permits to fish; of this number, 73 were issued to residents of the United States, 2 to gentlemen from England, and twenty-seven to inhabitants of our own province. The sum of \$375 was collected for permits..."

1888

Dawson, 1969

 An independent fur trade post was built on the Nipigon River called McKirdy's

The Port Arthur Illustrated, 1889

- "of whitefish 500,000 lb. were caught with 360,000 lb. of trout, 48,000 lb. of sturgeon, 91,000 lb. of pickerel and 30,000 lb. of other fish, or a total weight of over one million pounds, which sold for over \$33,000" for the depots of Port Arthur and Rossport

MacDonough cited by Buzz Lein, 1974

- Mr. MacDonough (U.S.A.) fishing in Nipigon
- current below Pine Portage abounding in fish
- "that access to these solitudes has been of late years, too easy"
- talks of going up the river and passing under the fine bridge built in the U.S.A. and shipped over in pieces
- it took 6 hours to carry gear across Long Portage (Frazer Creek up to Abitibi's camp on Lake Jessie)
- presence of birch bark canoes 35' long 5' wide, called North canoes
- "it is no longer possible, as it was twenty-five years ago, to take in a day a barrel of trout averaging 4 pounds, nor can the angler now quickly fill his basket within sight of Red Rock landing"
- these are statistics for 2 hours angling with one rod 1886 - 11 pounds - average weight per fish 2 pounds 2 oz 1887 - 11 pounds - average weight per fish 2 pounds 1888 - 10 pounds - average weight per fish 2 pounds 4 oz
- "unless it is cherished, the glory of the Nepigon (sic) may fade and the story of its marvelous attractions may become a tradition of the past"

- "tourists who intend visiting Nepigon (sic) River can procure all ordinary supplies and camping requisites at the Hudson's Bay Company Post
- \$1.25/person/day for clothing, provisions and camp outfits
- \$20.00 for tackle and fishing gear for several seasons
- guides and hired canoes \$2 4/day for 2 men, 1 canoe
- Steel River choicest trout fishing between falls and lively rapids, evidence of poachers using explosives
- speckled trout varying from ½ to 5 pounds, possible to catch hundreds of fish
- mentions use of dip-nets and dynamite in the Gravel River
- Camp Alexandria ½ to 2 dozen trout, many over 2 pounds, also 3 or 4 whitefish from 1 to 4 pounds
- rapids above and below camp Alexandria are frequented by whitefish from Lake Helen to Nipigon Bay in such numbers as often "crowd out" the trout
- trout are found all along the broken water between Camp Alexandria and Cameron Falls
- the largest trout are found in a wide deep basin under the falls
- better fishing was found at Pine Portage
- also large trout at Big Canoe Landing
- many large lake trout at base of High Falls
- Whitcher takes note "explosives and manifold devices of abusive practices have left their mark on these once faithful resorts"

1889 Arthur, 1973

- Notes from Overseer Flanagan: "Fishing for pleasure with fly and hook and line have been the only methods practiced here during the past season. No netting or other illegal means of procuring fish have been resorted to. In this connection I have no complaints to make, nor has any infringement of the fishery laws been brought to my notice."
- "The River Nepigon (sic) was throughout the season in very fair condition for fly fishing, the water being low and remarkably clear. Any quantity of fish was in the stream, still complaints were made that the trout would not rise readily to the fly. Many fine catches, however, were made and large fish taken.
- "Not so many anglers visited the Nepigon (sic) the past season as during the previous year, owing in great measure to the exorbitant charges made during 1888 by Indians and halfbreeds who act as guides and boatmen. This great objection was, however, much mitigated during the past season by having men brought in from other localities."

Prior to 1890 R. Gollat, 1975

- woodland caribou were plentiful and moose were scarce

 caribou were replaced after this time by moose, probably due to changes in habitat

1890

Dawson, 1969

- Hudson's Bay Company post (Mud River) located on Pikitigushi River mouth
- Hudson's Bay Company post (Sand Point) located at mouth of Pijitawabik Bay

estimated dates of existence 1890-1924

 Hudson's Bay Company post (Grand Bay) located on Grand or McIntyre Bay

also estimated 1890-1924

- Hudson's Bay Company post (Bay View) located on Orient Bay

1891

Edward R. Hewitt, 1948

- Mr. Anderson, present factor, of Hudson's Bay Company Post at the head of Lake Nipigon
- Hudson Bay Company took large numbers of trout in their nets near spawning beds every autumn, which were used as their winter supply and were shipped by sled to other Hudson Bay Company posts within reach, packed on ice and kept year around
- average weight 10 to 11 pounds cleaned and with head
- Hamilton Pool (Island Portage) 11 pound speckled trout dressed and with head, caught by an Indian, said to be "as large as these fish get"
- "all the large trout in this great pool were collected on this gravel space and rose to the fly, several at each cast"
- Ed caught one 8 pound speckled trout" near the spawning beds (no location) in Lake Nipigon
- considered ling detrimental to trout populations
- mid august Ed reached the best fishing grounds at Pine Portage - many 4 pounders
- fish averaged 3 pounds 63 trout larger than 6 pounds
 24 trout larger than 7 pounds
- below Virgin Falls (20 foot drop) many trout 3,4, & 5 pounds
- ALEWIVES above the falls (ed. note: probably not alewives but ciscoe or whitefish)
 - caught 13 pounds trout and calculated the weight using length x square of girth 800

- caught six pounds of trout at many other places in the river generally with a spinner and fly
- a photo of a scale of a 6 pound fish revealed age at 6½ years
- Ed contributes great growth to the abundant food furnished by the large lakes, especially alewives
- Hewitt had noticed 2 varieties of trout
- "one a rather thin and deep fish with very red sides, especially next to the fins, and the other variety much rounded and fatter, not so deep, with a rather light bluish coloration on the sides"
- "the red fish" lived in the river itself, in swift water
- the red trout are known to reach a very large size (19 pounder recorded by one of the early survey parties)

Algoma Miner, Oct. 24, 1891

- "Fishery Inspector Keefer Confiscates Boats and Burns Nets"
- Man caught fishing without a lease on an Indian reserve fined \$100 and had his equipment confiscated
- also seized Robert Dick's boat at Pt. Porphrey, fined \$20 and had nets burned
- fines set to fishermen who were not fishing in their designated areas
- "but the fishing laws were made to be enforced if possible, and Mr. Keefer is evidently determined to see that they are enforced"

1892

Ontario Game & Fish Commission Commissioners Report, 1892

- closed season for speckled trout Nov. 1st to Nov. 30th.
- net fishing is prohibited except under leases or licenses
- the use of explosives or chemical material for killing or catching fish is illegal
- fishing by torch light or other artificial light is prohibited
- persons who do not reside in the Province must procure from the Commissioner of Crown Lands a permit or licence before beginning to fish - the fee is \$5.00 and the permit shall be good till the end of the angling season of the year in which it is granted
- William McKirdy, overseer for River Nepigon (sic), L.
 Nepigon (sic) and adjacent waters
- game fish, including Nepigon (sic) trout, are being netted illegally and shipped to the United States according to Mr. McKirdy

Wright R.R., 1892

- "in the Nipigon, fish (speckled trout) up to 17 pounds in weight have been secured"
- "the food of the brook trout is chiefly formed of insects and insect larvae, it is therefore not surprising that, with the cultivation of the country and the consequent reduction of breeding places for flies, the trout should have become scarcer"

1894

W. McInnes, 1894

Summary of the fish:

The Nipigon river has long been famous as a trout stream. The brook trout are probably unexcelled any where for size and numbers, running up to weights of 5 to 7 pounds and over. They are not confined to the river, but are caught in the main lake itself, a fact which renders their extermination by legitimate fishing in the river practically impossible. In addition to brook trout the principle food fishes of the lake are lake trout, pike and white fish, all of which are abundant"

Goodier, 1982

- rainbow trout stocked at Port Arthur

1895

Dawson, 1969

- Hudson's Bay Company post (Nipigon Store) built on the Nipigon River
- this location is still being used by the Company

Goodier, 1982

 by 1895, there were 12 commercial fishing licences held at Rossport, one at St. Ignace Harbour, and five at Nipigon

1896

R. Gollat, 1975

- Jack McKirdy recalls that a group of indians brought a moose to his dad's store in Nipigon and wanted to know what it was.
- few people had ever seen a moose up until that time
 moose apparently became abundant in the area by 1916

Ontario Ministry of Natural Resources, 1987

 the first resident deer licence was established (\$2.00) in Ontario and 3,452 licences were issued

Hamilton & Brigham, 1986

- construction of new Hudson's Bay Company store adjacent to the railway
- the water front locality of the Red Rock House was abandoned due to increasing efficiency and cost competitiveness of railroad transportation
- fish licensing moved to McKirdy's store

1899

Goodier, 1982

- rainbow trout stocked at Port Arthur

Ontario Ministry of Natural Resources, 1987

- Fisheries Department formed to deal with fisheries matters

1900

- season for moose, reindeer and caribou was open in 1900 and every third year thereafter
- calves were not to be hunted and a bag limit of two deer, one bull moose, or one bull reindeer, or one bull caribou was imposed; elk were not to be taken at all

Annual Report of the Fisheries Branch, 1900

- William McKirdy reports "the year of 1900, from a revenue point of view, has been the most successful in its history"
- revenue for year ended Dec 1900 = \$1040.00
- estimated that visitors spent \$9000.00 in Nepigon (sic) not including railway, steamboat or hotel expenses

1900

Port Arthur News-Chronicle August 21, 1963

- about 1900 all trout caught were salted in brine and shipped to market in 100 pound kegs to the United States; they were then picked up by sidewheel steamers
- fishing gear and boats were hand-powered; oars and sails
- six weeks of fishing produced one hundred 100 pound kegs of fish (Point Porphory)
- it was noted that in this time period that all fishing on Lake Superior was commercial in nature

- the overseers consider the River Nepigon (sic) the "most noted fishing river" and also the "finest trout stream in America"
- the Nipigon River is the virgin home of the speckled trout, specimens weighing 5,7 even 10 pounds
- after passing Lake Helen, there is a little Indian village at river mouth
- at Camp Alexander is the initial portage
- "no reliable fishing is to be obtained below Camp Alexander"
- "between Lake Nepigon (sic) and Camp Alexander there are falls and rapids in quick succession and good fishing is to be had almost anywhere between these points"
- at the foot of Virgin Falls there are hundreds of speckled trout and whitefish
- the overseer suggests certain improvements ie. construction of landing places, improved portages, trails to desirable pools, better sanitary arrangements
- a visit of inspection was made by the Commissioner and Deputy Commissioner
- urged for reservation of a strip of land on each side of the river, in addition to the one chain already reserved to protect scenery
- suggests experiment of fertilizing the eggs of brook trout from some of the preserves with Lake Nepigon (sic) male to produce a hardy offspring

Table 2. Revenues from sport fishing permits on the Nipigon River system from 1900 to 1915.

Year Revenues 1900 \$ 1040 1901 \$ 940 1902 \$ 1095 1903 \$ 1080 1904 \$ 1075 1905 \$ 1375 1906 \$ 1595 1907 \$ 1200 1908 \$ 895 1909 \$ 983 1910 \$ 974 1911 not reported 1912 \$ 1070 1913 \$ 1155 1914 \$ 957		
1901 1902 \$ 1095 1903 \$ 1080 1904 \$ 1075 1905 \$ 1375 1906 \$ 1595 1907 \$ 1200 1908 \$ 895 1909 \$ 983 1910 \$ 974 1911 not reported 1912 \$ 1070 1913 \$ 1155 1914 \$ \$ 1005 \$ 957	Year	Revenues
	1903 1903 1904 1905 1906 1907 1908 1909 1911 1912 1913	\$ 940 \$ 1095 \$ 1080 \$ 1075 \$ 1375 \$ 1595 \$ 1200 \$ 895 \$ 983 \$ 974 not reported \$ 1070 \$ 1155 \$ 1005 \$ 957

Source: Annual reports of the Fisheries Branch Annual reports of Game and Fisheries

- increase of pike in the Nepigon (sic) River, vigorous steps taken by the department towards eradicating this pest from those waters
- the revenue for permits amounted to \$950.00
 19 Canadian permits

55 to foreigners mainly United States

- "the increase of pike and walleye on the river, making sad havoc on the trout"
- large quantities of pike and walleye destroyed by tourists

 suggest more radical means such as netting them during spawning season and destroying them

- "although the Nepigon (sic) River is a vast spawning bed for brook trout, the fact remains that the main supply of large fish came from Lake Nepigon (sic), as is manifest by the large fish caught early in the season"

 suggest that the size of brook trout would decrease if Lake Nepigon (sic) was interfered with disturbing the brook trout

- this would "destroy the prestige of the river as the King trout stream of the world"

- \$10 000.00 spent annually for supplies, guides etc.

"too much trouble cannot be taken to preserve this stream as it is today"

1903

Annual Report of the Fisheries Branch, 1903

- fourth annual report
- began destruction of coarse fish, 1800 pike, 389 pickerel and 803 suckers
- Lake Nepigon (sic) leased to Canadian Fish Co., should start operation next season
- 100 trout (average weight 2 pounds) transferred to Board of Trade of Rat Portage, some died in route, but remainder were safely deposited in good condition, transportation by Canadian Pacific Railroad
- Lake Nipigon revenues rose to \$1095.00 \$990.00 from 64 foreign netting permits
- some thousands of pike (some 10 pounds each) were destroyed as were large numbers of pickerel and suckers
- advised to continue netting these destructive fish

John Todd, 1977

 survey crews for the National Transcontinental (now Canadian National Railway) passed through Nipigon

- coarse fish destruction continued, more radical measures suggested
- revenue from fishing permits \$1080.00
- report by William McKirdy states that 2½ pounds is the average size of the brook trout
- on the river the largest brook trout was 8½ pounds
- Lake Nepigon (sic) is "overflowing" with whitefish, lake trout, and brook trout
- old residents on the lake claim that brook trout weighing 10 to 12 pounds have been caught on the spawning beds
- the overseer has mapped 20 miles of spawning beds
- spawning season commences on October 15
- most of the streams entering into the lake have no trout in them, except in the higher reaches; one exception, Sand River where the trout are as plentiful as in Lake Nepigon (sic)
- suggests Lake Nepigon (sic) trout be used to stock depleted lakes and rivers
- "The Nepigon (sic) River is itself one vast spawning bed on all its rapid portions" " I passed over half a mile of spawners at the foot of Pine Portage where fish fairly covered the stream" (William McKirdy)
- Mr. Henry Bristol (New York) caught 10 trout equalling 60 pounds of weights 6, 7¼, 6, 5½, 6, 5½, 5¼, 5¼, 7, 6¼

6th Annual Report at the Fisheries Branch, 1905

- revenue \$1075.00 from tourist permits
- destroying of coarse fish continued <u>apparently</u> resulting in large quantities of small brook trout being seen in the shallow water
- shipment of 500 trout (varying sizes) to Bow River at Banff by C.P.R. car; the operation was successful with only 4 fish lost
- spawning fish in all the shallow rapid waters from the 20th of September until the 20th of October
- a 25 pound steelhead salmon was caught in Lake Nipigon, probably a result of those fry deposited a few years ago in Lake Superior
- overseer feels that salmon fishing would be desirable to add to the already famous trout stream

- the fellows made at least 2 trips to the Nipigon River and at least one to Ignace Island
- the modern Nepigon (sic) has been "popularized" and "commercialized" "it is paying the dread penalty of literary distinction"
- "crowding portages with fellow tourists (hated term) and bumping canoes continuously"
- Kirkland Alexander found that the Nipigon River was being destroyed by tourism in 1905
- this is what he had to say about it: "to read about the fabulous wilderness fishing that these people had is enough to make a fisherman break out in speckles himself. And to get it, you really didn't have to go further than the mouth of the nearest little river where it dropped into Lake Superior. Look at this same country now. It is amazing that it took so few people to despoil such a great land in such a short length of time, something less than seventy years!"

Chronicle Journal July 13, 1962

 the engineering office of the Division E of the North Bay Transcontinental Railway is constructed in Nipigon later to become, in 1981, part of the Nipigon Museum Building

Dawson, 1969

- Jackfish Post at mouth of the Jackfish river operated by Revillion Frères (1905 -1916)
- Nipigon Post at mouth of Nipigon River operated by Revillion Frères (1905-1916)

1906

Annual Report by the Fisheries Branch, 1906

- overseer for the Nipigon area was P.A. Leitch
- annual revenue of \$1375.00 collected from fishing licences
- fishermen claim that the average size of fish has declined and they are not as numerous as they were in earlier times; also report the river to be over-run by coarse fish
- one man employed for 6 weeks netting, destroyed 7632 pike, 2282 suckers, 228 walleye, 145 whitefish totalling 10287 fish
- a guardian was maintained on the river from June 9 to October 31 to protect spawning trout after fishing season closes
- with the locating of the Trans-continental Railway along the north end of Lake Nipigon, traffic has greatly increased

- when construction commences on the line, this traffic will be a serious menace to the fishing in these waters; some efficient means of protection should be implemented
- 500 trout transported for stocking to Kicking Horse River, west of Banff by C.P.R., only a few fish were lost during the trip
- lake trout in Lake Nepigon (sic) up to 15 or 20 pounds; also whitefish, pickerel, sturgeon and speckled trout were present at mouths of various streams entering into the Lake
- brook trout were being taken by Indians with nets in shallow water, close to shore at river mouths therefore they captured large quantities
- one Indian had 2000 brook trout (2 to 7 pounds) to be used for dog feed
- Indians blamed for decline of brook trout especially large fish
- at Virgin Falls their nets were placed across channels blocking migration
- suggest measures to stop destruction of brook trout in this manner
- suggest combining fishery overseer with Superintendent of the Forest Reserve and Fire Rangers will also be Fishery Guardians
- also suggest licensing guides; infraction of regulation by guide or his party results in licence loss
- also recommend a bounty on coarse fish to decrease their numbers

Annual Report of the Game and Fisheries, 1907

- revenues for the year totalled \$1595.00
- extraordinarily dry season
- tourism increasing and fishing reported excellent
- "Considering that for years the Nipigon has been fished for nothing but the game speckled trout, this would naturally reduce their numbers by degrees; but when also considering that nothing has been done to reduce the quantity of the coarser varieties which live largely upon the spawn and fry of the speckled trout. It is, therefor, not surprising that the speckled tour should be becoming less numerous year by year when they have such odds to contend with."

1908

Annual Report of the Game and Fisheries, 1908

- revenue of \$1200.00 for the year
- season over a month late in opening, extremely cold for the whole season
- waters of Nipigon were much lower due to dry 1906 and 1907

- 1907 levels lower than any previously recorded
- low water gave opportunities to see "now numerous the coarse fish are becoming in this river, and the destruction they are causing upon the famous game speckled trout for which the river is renowned"
- speckled trout have become less numerous year by year due to
 fishing pressure
 - 2) inability to reduce quantity of coarse fish which live largely on spawn and fry of speckled trout
- 2 methods proposed to decrease number of coarse fish
 - 1) net and transport coarse fish to eastern markets
 - give someone the privilege of netting and shipping to markets for their own gain

John Todd, 1977

- transport network was put in place between the mouth of the Nipigon River and Lake Nipigon to carry supplies for the construction of the National Transcontinental Railway, north of Lake Nipigon
- the Nipigon Tramway (18 miles, 3 foot gauge tramway)
- supplies were loaded onto the narrow gauge flat cars, which were then loaded onto a scow for the trip up Lake Helen and the Nipigon River to Alexander Landing (12 miles)
- the cars were then run off the scow onto the track and were pulled 18 miles by a "donkey engine" to South Bay of Lake Nipigon
- the cars then loaded onto scow for 70 mile trip to the northern depot on Ombabika Bay
- "a large dredge was busily engaged in deepening the channel into Nipigon Bay, so that the larger lake freighters laden with rails, could tie up alongside the wharf"
- winter tote-roads were used after freeze-up to transport supplies
- presence of both Hudson's Bay Company and Revillion Fréres (2 old rival fur trading companies) as well as William McKirdy's independent store at the mouth of the Nipigon River

1909

2nd Annual Report of the Game and Fisheries, 1909

 less visitors due to general depression therefore, lower revenue of \$895.00

John Todd, 1977

- construction of the Transcontinental Railway made it necessary to place a steamer on the Nipigon River between Nipigon Station and Camp Alexander
- steam tramway does not interfere with the river; it is 3 miles west of river

Source: Todd, 1977

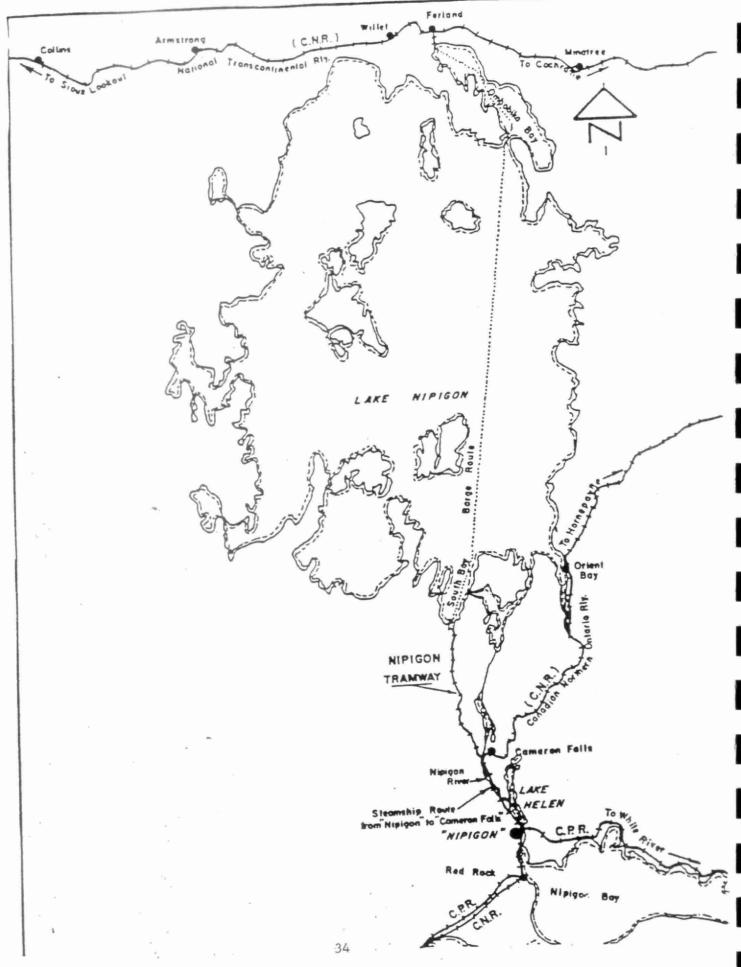
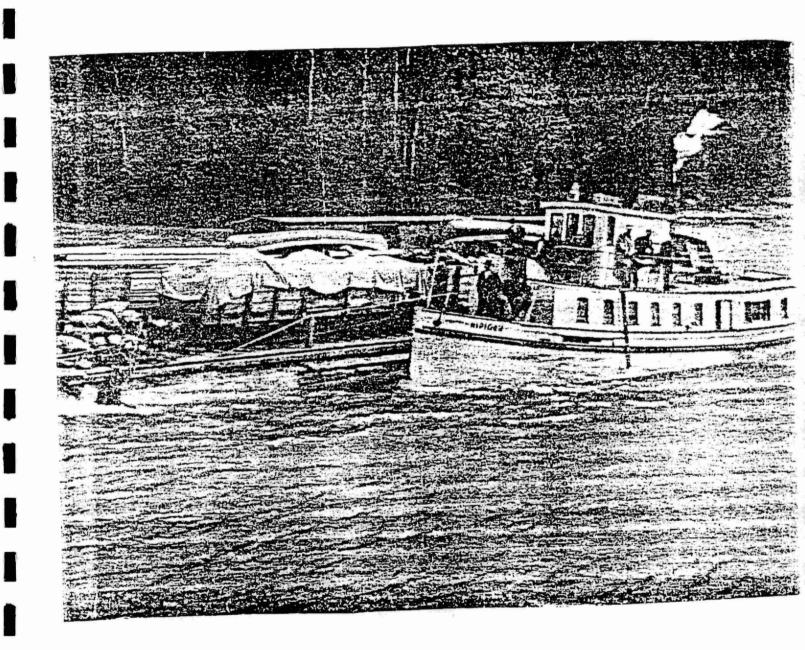


Figure 4. This rare photo taken by Mr. A. J. Ibester, chief engineer for the Canadian Northern Ontario Railway, shows the freighting operation as carried out up the Nipigon River. The steam driven "NIPIGON" is hauling the barge loaded with narrow gauge flat cars, they in turn are loaded with construction materials for the building of the CNOR.

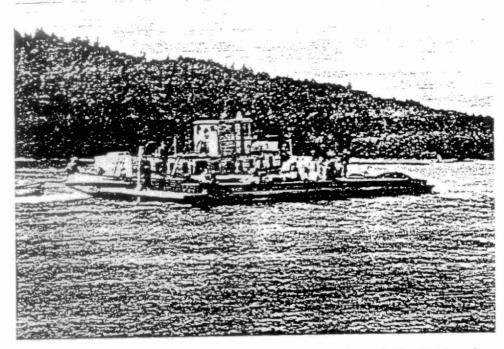
Source: Todd, 1977



Source: Todd, 1977

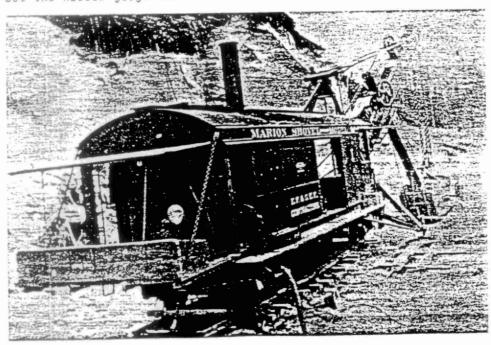
Figure 5a.

ă:



The transportation of rails for the construction of the National Transcontinental Railway in 1908 on Lake Nipigon, this time without the narrow gauge flat cars.

Figure 5b.



Marion Steam Shovel' model 60' as used by E.F. and G.E. Faquier contractors on the construction of the National Transcontinental Railway in the Nipigon region. T.S.Armstrong photo.

1910 Wilson, 1910

- "The fisheries of Lake Nipigon promise to be very valuable, but their exploitation at the present time would result in the more rapid extermination of the Indian inhabitants of the district by cutting off their chief food supply"

noted gradual decline of fur trading and increase of railway

exploration and construction

- some fish noted by Wilson: lake sturgeon, catfish, lake herring, silver trout (<u>Salmo fontinalis</u> var. <u>Nipigonensis</u>), brook trout, great lake trout, pike, small mouthed black bass, large mouthed black bass, wall-eye pike, sucker

"The water - powers of the Nipigon river will be of more than local importance, when utilized, as they are probably one of the largest and best of the more readily accessible

undeveloped water-powers in Canada"

Thunder Bay Evening Chronicle October 15, 1910

- freight steamer Minerva struck a rock in Lake Nipigon and sank
- the Minerva was making her regular passage across Lake Nipigon, with a cargo of bags of cement, some hay, and 3 or 4 tons of package freight
- the boat went down at Sherburn Island, 18 miles from South Bay
- the steamer, owned by the Revillion Brothers, was used to transport supplies to the contractors working on the Transcontinental railway

Annual Report of Game and Fisheries, 1910

- many brook trout from 4 to 8 pounds taken this season
 larger game (moose, caribou, red deer) have increased greatly in numbers during the past few years due principally to regulations prohibiting firearms in the Nepigon (sic)
 Forest Reserve during closed season
- "the Nepigon (sic) Inn" erected at Nepigon (sic) Station catering to tourists

the overseer is encouraging tourism

 suggests advertising to increase receipts from angling permits, hunting licenses and rental of summer cottages and campsites John Todd, 1977

"Canadian Northern Railway began route that followed Nipigon Bay, travelled up the west side of the Nipigon River for 6 miles, crossed the river by the multi-span bridge, travelled 4 miles along the east bank, northeast along Orient Bay and then to Longlac"

- the town of Nipigon was prosperous while the railway was being built
- the railway also gave new access to the Nipigon water system resulting in increased tourism

1911

Thunder Bay Museum Nipigon File

- CNR line was constructed along Nipigon Bay from Red Rock to the town of Nipigon. Here the CPR right-of-way hugged the shoreline at the base of a high, rocky bluff and there was just no room for another right-of-way. To overcome this obstacle, the CNR built a retaining wall close to the lakes shoreline and filled the space between it and the rocky shore with a huge amount of rock and fill, dredged from the lake and brought in from other locations. At Nipigon, the new line crossed a lagoon on a causeway, which also required a large amount of fill.

Annual Report of Game and Fisheries, 1911

- "Overseer Gordon discussed the setting of nets in Nepigon (sic) Bay with the fishermen, the men state that, in their opinion, these grounds should be reserved, owing to the fact that the bay is the natural spawning grounds of the fish. Therefore smaller fish are caught there. After fully going into the matter he thinks that it would be wise to discontinue the fishing in the Nepigon (sic) Bay section."
- "At Nepigon (sic), however, a danger is felt for the trout fishing. Recently the Government has advertised timber berths for sale on Nepigon (sic) Lake, and it is feared that the purchasers of the timber might endeavor to bring all the timber to Lake Superior via the Nepigon (sic) River. This would destroy the stream as a trout stream, and it is thought that every effort should be made to keep this stream in its present natural state. In view of the fact that hundreds of visitors from outside points come to this district every summer to fish in the Nepigon (sic), the stream is now looked upon as a national stream, and it is felt that it would be a crime indeed to spoil this stream by the running of logs and pulp wood down the river."

- conservation and maintenance of Nipigon River System stressed
- the increased market for skins of large brook trout may have been responsible for diminishing numbers of trout in these waters
- special licence has to be obtained in order to angle in Lake Nipigon, Nipigon River and adjacent waters

	2 weeks	3 weeks	4 weeks
permanent residents			
of Canada	\$ 5.00		\$10.00
non-residents	\$15.00	\$20.00	\$25.00

- licensing for local residents greater than 60 yards of gillnet - fee \$1.00 but less than 500 yards gillnet - fee \$10.00
- any Canadian citizen could ask to see licence and may report any unabiding individuals
- aim to conserve the fisheries and obtain the maximum benefit
- from their existence to the general public in particular, to protect the brook trout fisheries
- the improvement of angling facilities along banks suggested so accessible spots are not over fished
- a limit catch of 30 speckled trout, and 10 pounds of this fish in one day is in force throughout the province
- average size of speckled tout is about 2 pounds
- now suggest coarse fish are good to eat "in these cold waters the flesh of the pike is firm, flaky and not at all unpleasant to the taste"
- "pickerel is a splendid table fish"
- "at the present time very little is known of the angling potentialities of Lake Nipigon and the rivers and streams entering it, beyond the general fact that speckled trout are abundant in some parts of the Lake and in most, at least, of the rivers and streams flowing into it"
- "that under no circumstances will the noble River Nipigon ever again be subjected to the log driving operations", "log driving down the river would immeasurable depreciate, even irretrievably ruin, the trout fisheries"
- the log drive, in fact, did not stop until 1973 and it did have a considerable effect on bottom dwelling organisms

Goodier, 1982

- 304000 Atlantic salmon fry were stocked in the Nipigon River, Rossport area streams and rivers tributary to Thunder Bay
- Port Arthur dominion hatchery began operation

1912 Gollat, 1975

 wolves very abundant noted by Joe Gagnon who travelled from the town of Nipigon to Nipigon House via the frozen waters of Lake Nipigon

1913

Annual Report of Game and Fisheries, 1914

- observations of local habitants and Indians suggest goodly quantities of the better classes of the commercial fishes, such as the lake trout, whitefish, sturgeon, pickerel
- "it is known , however, that speckled trout of great size abound in certain parts of the lake, and in most of the rivers which feed the lake"

Recommendations from the Commissioner:

- that no commercial net fishing be allowed in Lake Nipigon for the present
- 2. that as occasion arises a modified licence be issued to meet purely local needs, but that in general the domestic licence, strictly for family purposes, be the only licence issued for these waters
- 3. that steps be taken to ascertain scientifically what classes of fish inhabit these waters, as also their main feeding grounds and spawning beds, in order that accurate knowledge may be available to guide the subsequent development of these fisheries
- 4. that special care be taken to issue no domestic or other licence for areas which are the habitual feeding or spawning grounds of the speckled trout

1913 Parker, 1988

- one specimen of paddlefish (<u>Polydon spathula</u>) was collected in Lake Helen on the Nipigon River
- since the turn of the century the peripheral range of the paddlefish has shrunk and the relict population of the the Great Lakes has been lost

1914 John Todd, 1977

- Canadian Northern Railway was built through northern Ontario early in 1914
- introduction of freight service

 Canadian Northern Railway (now Canadian National Railway) created its current roadbed by extending the shoreline, by building a retaining wall and a causeway, thereby creating the Lagoon

this required a huge amount of fill, some dredged from the

lake and some brought from other locations

1914 Goodier, 1982

 small numbers of brook trout were planted into Lake Superior water at the Nipigon River

1915

Annual Report of Game and Fisheries, 1915

- overseer L.E. Bliss

 last year the Department engaged men to take the pike, which were becoming increasingly numerous, out of the river

- pike were believed to be detrimental to young trout

- lake trout, whitefish, sturgeon and black bass are found in Lake Nipigon
- very little fishing is done in Lake Nipigon, the Indians being the only people who use nets, and they do so for their own use only

moose and caribou are very plentiful in the Nipigon Forest

Reserve

- very little hunting of moose in that section of the district therefore, they are on the increase
- very few red deer, plentiful partridge and duck

John Todd, 1977

 passenger service in 1915 completed Canada's transcontinental railways

Goodier, 1982

- Atlantic salmon spawned at Camp Alexander perhaps from a 1912 planting of that species
- small numbers of brook trout were planted into Lake Superior waters at the Nipigon River

Scott and Crossman, 1973 also Nipigon District, files

 a party from Fort William arrived at Jack McKirdy's in Nipigon and got outfitted for fishing

 two members of that party are held in fame today, Dr. J.W. Cook of Fort William and his guide, Ojibwa Indian Andrew Alexie

- they were fly fishing using a Cockatoush fly, which imitates the sculpin minnow found in all cold water trout streams
- Dr. Cook caught the world record brook trout at Rabbit Rapids, below Virgin Falls on the Nipigon River
- 14½ pound, length 31½", depth 11½", therefore, the largest brook trout landed by an angler (estimate the girth to be approximately 18")

- Andrew Alexie mounted both sides of the fish on birch bark

backgrounds

"it is doubtful that the record will ever be bettered in this country, for the changing face of the land, plus the short life of this species, makes it unlikely a bigger fish will be produced"

1916

Annual Report of the Game and Fisheries, 1916

Warden Donald McDonald of Fort William

 sportsmen report good catches, especially on the famous Nipigon River

authorities claim it to be the best speckled trout stream in

the world

- sportsmen commend the Department for pike and sucker removal

- overseer L.E. Bliss

- tourism down, caused no doubt by the general unsettled condition brought about by the war
- a larger number of big fish caught than usual
- moose very plentiful, deer on the increase

Goodier, 1982

small numbers of brook trout planted at the Blende River

1917

E.E.Millard, 1917

- fish are plentiful above Island Portage near the beginning of Pine Portage
- sculpins in shallows of little bay above and close to Island Portage, good trout bait
- Nepigon (sic) River contains 4 lakes in its course; 1st and largest being Lake Helen, further north are lakes Jessie, Maria, Hanna
- "at Camp Alexandria one may catch trout of a pound or larger in the first rapids, but the finest fishing near this camp is a mile or more upstream at the foot of Cameron Rapids"
- "any statement that a trout can swim against this long, powerful current (Cameron Falls) would receive little or no credence. It is an insurmountable barrier frought with danger. Though Mr. Broadtail (brook trout) is a highly finished swimmer, he has his stern limitations."

- Virgin Falls said to be the "paradise of the big trout"
- below Island Portage from the east bank of the river, or from the lower end at the foot of either falls, one can generally catch trout

"near the beginning of Pine Portage trout do not even hesitate to welcome you"

- near either shore or in the middle of the river 3,4,5, pounders are not uncommon
- Frazer River (empties into Lake Nepigon(sic)) contains ½ to 1½ pound fish
- "there are doubtless many bigger pools than those below Virgin Falls, but in all this world there are few places harboring such speckled trout as swim in those strong, boulder smashed rapids"
- minnows plentiful at Virgin Falls as well as whitefish
- E.E. Millard prefers whitefish over speckled trout for taste
- the stretch of river between Virgin Falls and Miner's Rapids to Canal Rapids is full of trout
- "no recognized rules of warfare or of sport where the pike is concerned - dynamite and rough-on-rats used"
- "the trout hog previously abundant on the Nepigon (sic) has been banished so the trout are as large and plentiful as ever"
- game wardens enforce the laws so the trout are taken fairly, officers inspect licenses at Camp Alexandria, Island portage, Virgin Falls and other points

H. G. Cumming, 1958

- in Lake Nipigon, a significant commercial fishery for lake trout did not start until 1917, when railway access was established
- the fishery began "as an emergency food supply measure" for the war
- ice houses established at MacDiarmid where Department employees acted as fish buying agents until 1958

1917 Adolph King, 1971

"As experienced fishermen all agree that the short season of two months in September, 1916 with an outfit thrown together in a big rush, both boats and equipment far from being the best had produced an unbelievable tonnage that fishing outfits swarmed into MacDiarmid from all directions in the spring of 1917 to get their share of what was regarded then as a 'Bonanza' or a 'Klondike'. Some succeeded and some failed in Lake Nipigon. There were outfits being unloaded off C.N.R. flat cars at Orient Bay and smaller gas boats unloaded at MacDiarmid. Day after day the tugs and gas boats which were operated by experienced men came in loaded with fish. This condition ran from 1917 through 1918 and 1919." - this author suggests that the lake trout of Lake Nipigon were not healthy prior to 1917 because not enough food was available for the amount of trout present. The author had seen in 1917, especially trout, netted in Lake Nipigon with their head near the weight of the rest of the body.

1917-1930

Robert Walroth, 1979

 unrestricted fishing in these years produced extremely high yields in several species (ie. lake whitefish, lake trout and sturgeon)

1918

Adolph King, 1971

"Our government enforced a regulation to limit the steam tug boats to 7 tons per week and 4 tons per week for the gas boats. This regulation posed another problem for both the steam tugs and gas boat operators in that any fish brought to the government packing house over the allotted weeks catch would be confiscated by the government."

> Annual Report on Game and Fisheries, 1918

- region including Port Arthur, Pt. Magnet, Fort William, Nipigon Bay and Carpenters Beach; revenue = \$59560.00
- for Lake Nipigon the revenue amounted to \$128,647.00

Hydro News, 1943

 hydro development began on Cameron Falls with a maximum of 675 construction workers

J.R. Dymond, 1926

- the "Nipigon Trophy" donated by the hotel department of the Canadian National Railways for annual competition by tourists for the largest speckled trout won by W.W. Butler of Montreal P.Q. with a length of 25½" and 6½ pounds
- "most of the specimens that have won the Nipigon Trophy have been taken just above Virgin Falls, which is 2 or 3 miles below the source of the river"
- Nipigon Trophy is now awarded annually by the Chalet Lodge

Goodier, 1982

- the first provincial hatchery on Lake Superior was constructed at Port Arthur "fully equipped for the hatching of both speckled and lake trout, whitefish, herring and pickerel...having a capacity for 75 million whitefish and 15 million trout". - the 1919 daily limit for brook trout was 30 fish or 10 pounds and the season was closed from September 15 to April 30th

> Daily News-Chronicle July 18, 1919

- 'Nipigon' is derived from an Indian word which means "large quantities of water beyond"

Annual Report of the Game and Fisheries, 1919

- 1919 regulations as to Nepigon (sic) Waters
- except under the authority of a licence, no one shall fish in the waters of Lake Nepigon (sic) or the Nepigon (sic) River in the district of Thunder Bay or in any tributaries of said lake or river
 - a) licences not transferrable and to be produced upon request
 - b) all fishing camps and fishing parties visiting such waters shall be subject to supervision by superintendent or inspector, warden or overseer
 - c) cutting of live timber prohibited except where necessary for the purpose of camping or shelter
- licence for angling in Nepigon (sic) River system and Lake Nepigon (sic) residents = \$5.00 for 2 weeks, \$10.00 for season

non-residents = \$15.00 for 2 weeks, \$20.00 for 3 weeks, \$25.00 for 4 weeks

- those residents in the vicinity of Lake Nipigon allowed to fish for domestic purposes only and not for sale or barter 60 yds of gillnet - fee of \$1.00
 - greater than 60 yds and less than 500 yds fee of \$10.00 Special Fishery Regulations 1919 (Province of Ontario)
- "game fish" shall mean large and small mouthed black bass, maskinonge, salmon, speckled trout, brown trout, and all pacific trout"
- "salmon trout" shall mean <u>Aristivomer namaycush</u>, Great Lake Trout, Grey Trout or MacKinaw Trout
- "salmon" shall mean <u>Salmo salar</u>, the Atlantic salmon, onananiche, or sebago salmon
- regulations regarding speckled trout, brown trout, rainbow and other Pacific trouts

- a) no one shall fish for or take speckled trout or brown trout otherwise than by angling
- b) no one shall fish for, catch, or kill any brown trout or speckled trout from the 15th day of September in each year to the 30th day of April
- c) no more than 30 (number) or 10 pounds of speckled or brown trout may be caught in one day by angling
- d) the sale or export of speckled trout, brown trout, rainbow or other Pacific trout is prohibited non-resident angler under permit may take the lawful catch of 2 days fishing

J.R. Dymond, 1926

- peak harvest of Lake Whitefish from Lake Nipigon 1620970 pounds
- peak year harvest of lake trout in Lake Nipigon with 617900 pounds taken
- CNR's "Nipigon Trophy" won by A.S. Brown of Kingsville, Ontario with a speckled trout of a length of 24½" and weighing 6½ pounds, Times News June 3, 1972
- harvest of 600,000 pounds of lake trout in Lake Nipigon
- Edward, Prince of Wales and 10 British noblemen visit the Orient Bay Resort to fish for speckled trout on the Nipigon River

Daily news-Chronicle July 18, 1919

- wood hauled in winter to station to be loaded on cars or to the the waters edge to be floated in a raft in the spring to the pulp wood boats, in Nipigon Bay
- most of these boats belong to American companies
- "The waters in Nipigon Township teem with fish. There is a small fishing station called Port MacDiarmid on Orient Bay from where the fish is shipped in vast quantities to all parts of the country."

1920

Hydro News, 1943

- construction of hydro development at Cameron Falls began on the Nipigon river in 1918, and operation began in 1920 with 2 generators and a total capacity of 25000 horsepower and one transmission line to Port Arthur
- elevation of Lake Nipigon 852' elevation of Lake Superior 602' drop of 250'

The Canadian Engineer, 1919

1919

- Lake Nipigon to Rabbit Rapids Virgin Falls Devil Rapids to Emma Lake = drop of 42'
- Emma Lake to Flat Rock Rapids White Chute Pine Portage Rapids = drop of 55'
- south of Lake Maria and Jessie (near Cameron's pool) are two available sites --- drop 65' Cameron Falls --- drop 53'

M. E. MacCallum, 1989

- Lake Sturgeon common in Steamboat Bay until the 1920's (Wawia pers. comm.)
- "blue pickerel" (Sauger) (Smutylo pers. comm.) were also common until the 1920's

T. C. James, 1921

- Cameron Falls Dam concrete, 200' long and 43' high
- potential 6 generators 2 operating now
 Cameron Falls linked to Nipigon by road
- a road also begun between Port Arthur and Nipigon

Near, 1982

- with the Cameron Falls development, the increase in water levels created a new east arm, flooded the Narrows, and extended Jessie Lake over the former basin of Lake Marie
- "created a headpond 4 square miles in area, extending 12 miles upstream"

J.R. Dymond, 1926

- CNR's "Nipigon Trophy" won by W.M. Jessup of Syracuse, N.Y., for a speckled trout of 7½ pounds and 29½" long

1921

Annual Report Department of Game and Fisheries, 1921

- first reported stocking of brook trout, in the Nipigon River, 20000 fry and fingerlings
- CNR's Nipigon Trophy won by W.G.H. Browne of Toronto, Ontario, for a speckled trout of 7 pounds and 24" long

1922 Near, 1982

- fish ladder - following several years of observations the operating staff <u>reported</u> no perceptible use of the fish ladder and it was subsequently sealed off during construction activities associated with Unit No. 7 (1958)

 temporary log slide was provided in November 1922 for an unexpected log drive by the Western Stevadore Co. Ltd., utilizing one of the sluices at the main dam

Annual Report of the Department of Game and Fisheries, 1922

Stocking Data

- Nipigon River 27500 speckled trout fry and fingerlings 10000 speckled trout fry and fingerlings Stewart Lake 10000 speckled trout fry and fingerlings Frazer Creek 10000 speckled trout fry and fingerlings Gravel River 5000 speckled trout fry and fingerlings -Spring Creek 5000 speckled trout fry and fingerlings -Gravel Lake 5000 speckled trout fry and fingerlings -Castle Lake 15000 speckled trout fry and fingerlings Clearwater Lake
- 10000000 whitefish fry and fingerlings Lake Nipigon

J.R. Dymond, 1926

 CNR's "Nipigon Trophy" won by C.E. Abbott in Bessemer, Apounderta; 7 pounds 9 oz and 27" long

1923 Near, 1982

 Ogoki diversion suggested by Ralph Keemle but not initiated until 1943

John Todd, 1977

 the northern and southern railway routes were linked in 1923 by a spur line; with this came re-routing and Nipigon was no longer on the main line

Table 3. Stocking data for the Nipigon River, 1921 to 1990.

_ocation	Species	Year	Quantity	Age
Nipigon River	Brook trout	1921	20000	Fry & fingerlings
(no exact location)	Brook trout	1922	27500	Fry & fingerlings
(110 exact location)	Brook trout	1923	200000	Fry & fingerlings
	Brook trout	1924	85000	Fry & fingerlings
	Brook trout	1925	40000	Fry & fingerlings
	Brook trout	1926	149400	Fry & fingerlings
	Brook trout	1927	30000	Fry & fingerlings
	Brook trout	1928	65000	Fry & fingerlings
	Brook trout	1931	110000	Fingerlings
	Brook trout	1933	250000	Fry & fingerlings
	Brook trout	1934	21267	Yearlings
	Brook trout	1935	400000	Fry & fingerlings
	Brook trout	1936	56800	Fry & fingerlings
	Brook trout	1938	18000	Fry & fingerlings
	Brook trout	1939	58400	Fry & fingerlings
	Brook trout	1939	240	Adults
	Brook trout	1940	55600	Fry & fingerlings
Frazer Creek	Brook trout	1923	73000	Fry & fingerlings
Tubbi Orodi.	Brook trout	1924	20000	Fingerlings
	Brook trout	1928	25000	Fry & fingerling:
	Brook trout	1939	6000	Fry & fingerling
Lake Helen	Salmon trout	1924	20000	Fry
Edito Froidin	Salmon trout	1926	25000	Fry & fingerling
	Whitefish	1925	1000000	Fry & fingerling
	Whitefish	1925	1000000	Fry
Alexander Falls	Brook trout	1951	4000	12 months
Alexander Fano	Brook trout	1955	6000	12 months
	Brook trout	1960	50	36 months
	Brook trout	1984	302460	Eyed-egg
	Brook trout	1984	663	60 months
	Brook trout	1987	9000	4 months
	Arctic grayling	1959	900	12 months
Cameron Falls	Brook trout	1950	3000	12 months
	Brook trout	1950	1200	36 months
	Brook trout	1951	4000	12 months
	Brook trout	1953	4000	6 months
	Brook trout	1956	1500	12 months
	Brook trout	1960	50	40 months
	Brook trout	1974	5000	40 months

Table 3. Continued...Stocking data for the Nipigon River; 1921 - 1990.

Location	Species	Year	Quantity	Age
Cameron Falls	Lake trout	1950	15000	16 months
	Arctic grayling	1959	90	12 months
Pine Portage	Brook trout	1950	3000	12 months
ino i orage	Brook trout	1950	36000	6 months
	Brook trout	1950	1200	36 months
	Brook trout	1953	2000	12 months
	Brook trout	1953	4000	6 months
	Brook trout	1974	5500	6 months
	Brook trout	1982	32300	Eyed-eggs
	Brook trout	1983	34500	4 months
	Lake trout	1950	15000	12 months
Jessie Lake	Brook trout	1982	1138	36 months
	Brook trout	1983	500	16 months
	Brook trout	1984	1579	35 months
	Lake trout	1955	5000	6 months
	Lake trout	1968	5000	12 months
	Lake trout	1969	4000	12 months
	Lake trout	1970	2500	12 months
	Lake trout	1971	14500	16 months
	Lake trout	1973	2500	16 months
	Lake trout	1975	14500	16 months
	Lake trout	1976	14500	16 months
	Lake trout	1987	224125	Eyed-egg
Nipigon River	Lake trout	1982	40	Adult
(below L. Helen)	Lake trout	1984	3050	9 months
	Lake trout	1985	3010	12 months
	Lake trout	1985	33600	11 months
	Lake trout	1986	28800	11 months
	Walleye	1983	650000	Fertile eggs
	Walleye	1985	1623	Fingerlings
	Walleye	1986	187	Adult
	Walleye	1988	48	Adult

^{*} Source: Nipigon District files

Annual Report of Department of Game and Fisheries, 1923

1923

Stocking Data

200000 speckled trout fry and fingerlings -Nipigon River 25000 speckled trout fry and fingerlings -Stewart Lake 10000 speckled trout fry and fingerlings -Gravel Lake 10000 speckled trout fry and fingerlings -Castle Lake 20000 speckled trout fry and fingerlings Clearwater Lake 10000000 whitefish fry and fingerlings Lake Nipigon

J.R. Dymond, 1926

CNR's "Nipigon Trophy" won by W.D. Randall of Hamilton, Ohio; 7½ pounds and 26½" long

from 1923 to 1972 Chief Bay, Humbolt Bay, Gull Bay, McIntyre Bay and Poplar Point were all used at one time or another as landings for the dumping of logs into Lake Nipigon

beginning of log driving on both Gull and Sturgeon Rivers

logs sawn at mill near Macdiarmid

Wilson, 1991

log drives were conducted on the Nipigon River from 1923 to 1973; logs were stored above Virgin Falls before each drive, then were run over the falls then run over the falls at Pine Portage; the logs were then stored between Split Rock and the narrows above Jessie Lake; the log booms were towed down Jessie Lake by tug and stored above Cameron Falls; from there the logs were run to Lake Helen where they were stored prior to being towed to a mill on Lake Superior

many rivers in the Nipigon area were used for log driving

during this time period

Lawrie and Rahrer, 1973

log driving can hardly have failed to affect the streams concerned by mechanical scouring caused by the logs, water levels commonly controlled by one or more dams and the stream bed itself altered to clear obstacles away

deep beds of bark and waterlogged wood often accumulated

W.A. Clemens, 1923

- "peculiarities of Lake Nipigon's flora and fauna are the result of at least the following 3 outstanding factors; the short summer period
 - the limited amount of shallow protected water areas
 - the isolation from the Great Lakes because of the falls and rapids in the single outlet"

N.K. Bigelow, 1923

 Lake Nipigon is a relatively plankton poor body of water with the exception of its enormous diatomaceous flora

W. A. Clemens, 1923

- "Lake Nipigon is a natural fish cultural body of water"
- extensive shoreline due to Islands, protected feeding areas
- numerous tributary streams provide adequate spawning areas
- large size of Lake makes possible severe storms which keep the exposed shores almost barren
- large amounts of sand are brought down by some of the streams from the surrounding rocky drainage basin and create large, practically desert areas in the Lake
- development of insurmountable falls in the Nipigon River has prevented the movement of fish from Lake Superior
- despite the limiting factors, Lake Nipigon can be said to be a very productive body of water

1923

Ritchie and Black, 1988

 1728000 brook trout eggs (from approximately 617 females) were taken from the west and south bays of Lake Nipigon to the Port Arthur Hatchery.

F. B. Adamstone, 1923

- describes Lake Nipigon as a young, primitive Lake
- in regard to distribution of species, the greatest abundance of molluscs are found in shallower waters. This may be due to the fact that Lake Nipigon is subject to storms of considerable violence

Clemens et.al., 1923

- according to gill net records round whitefish do not extend to as great depths as the common whitefish
- suckers competitors with common whitefish for food
- ciscoes are abundant, but come into very little competition with other fish with regards to food, in that they are open water plankton feeders, subsisting largely upon freshwater shrimp and <u>Limnocalanus</u>. On the other hand they are fed upon extensively by the lake trout.
- ling, the chief competitor of the lake trout, feed on ciscoes

1924

H.H. MacKay, 1951

- Secchi disc reading in Ombabika Bay of 2.3m
- harvest peak of 93000 pounds of sturgeon

1924 Near, 1982

- survey of proposed dam site at Virgin Falls

- 2 more generators operating at Cameron Falls bringing the total number of generators to 4

J.R. Dymond, 1926

- CNR's "Nipigon Trophy" won by Robert Bell of Port Arthur; 7 pounds 9 oz and 27½ inches

Annual Report of Department of Game and Fisheries, 1924

Stocking Data

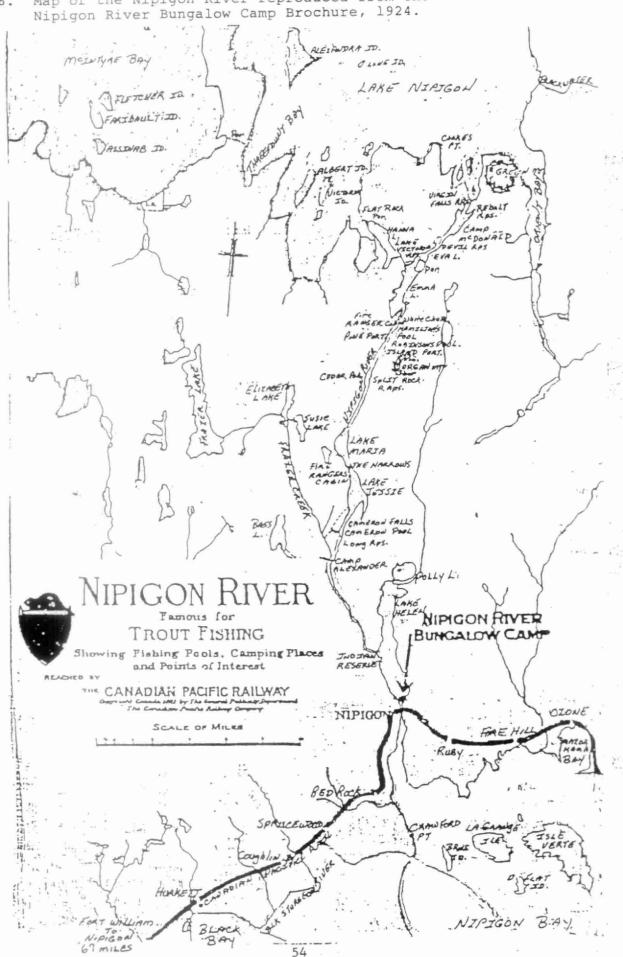
85000 speckled trout fry and fingerlings - Nipigon River 10000 speckled trout fry and fingerlings - Stewart Lake 20000 speckled trout fry and fingerlings - Frazer Creek 10000 speckled trout fry and fingerlings - Gravel River 5000 speckled trout fry and fingerlings - Castle Lake 5000 speckled trout fry and fingerlings - Gravel Lake -1000000 salmon trout fry - Lake Nipigon Lake Helen

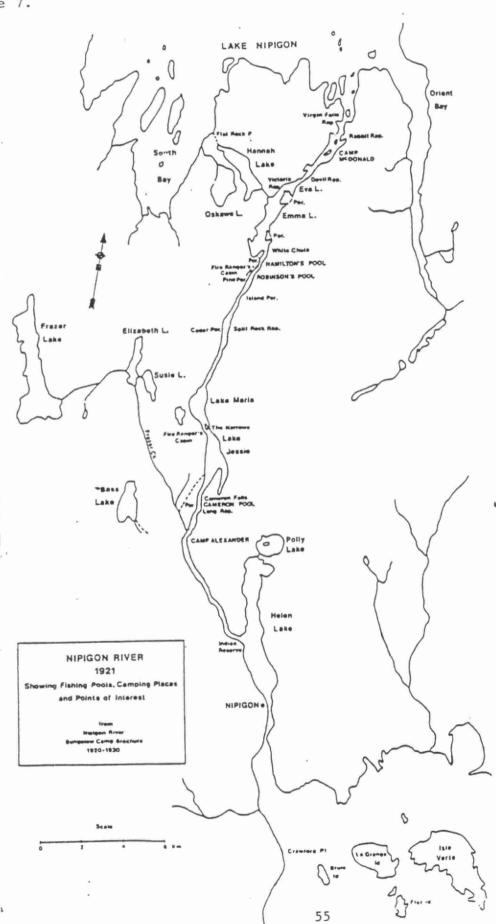
Ritchie and Black, 1988

- in brook trout spawn-taking operations 546000 eggs were taken from West Bay and 144000 were removed from a spawning bed near Nipigon House; the eggs were taken to the Port Arthur Hatchery
- Ontario Ministry of Natural Resources spawn-taking from Lake Nipigon brook trout stocks in South Bay and West Bay occurred annually from 1924 to 1931, because there were no hatchery facilities to keep broodstock

M. MacBeath, 1924

- Nipigon Bunglow Camp, near the mouth of the Nipigon river catering to tourists
- accommodation for 50 guests
- home of the largest red-speckled trout in the world
- guests from this camp caught several speckled trout at Pine Portage, also 2 rainbow trout
- guides noted a caribou at Camp Alexander
- Bass Creek well stocked with speckled trout weighing from to 2 pounds each
- "taking our quota of speckled trout and whitefish" above Virgin Falls





1924 R. Gollat, 1975

 double-crested comorants reported breeding on a small rocky island off the northeast shore of Murchison Island

- this colony consisted of 19 nests

1925

17th Annual Report of the Hydro Electric Power Commission, 1925

- propose that the flow of the river be regulated to ensure an adequate supply of water at all times to Cameron Falls Dam
- "a range of water levels on this lake of 9' could be secured without undue expense for land damages or control works"
- Virgin Falls Dam proposed at outlet of Lake Nipigon to control the outflow and regulate the levels
- increased energy demand by pulp and paper companies in the Thunder Bay area, therefore proposed extensions at Cameron Falls

Ritchie and Black, 1988

 970000 brook trout eggs were taken from the West and South Bays of Lake Nipigon.

Annual Report of Department of Game and Fisheries, 1925

Stocking Data

- 40000 speckled trout fry and fingerlings Nipigon River 5000 speckled trout fry and fingerlings Stewart Lake 20000 speckled trout fry and fingerlings Frazer Creek 10000 speckled trout fry and fingerlings Gravel River 5000 speckled trout fry and fingerlings Caribou Lake 5000 speckled trout fry and fingerlings McKenzie Lake
- 10000000 whitefish fry Lake Nipigon 1000000 whitefish fry - Lake Helen

J.R. Dymond, 1926

- "the sturgeon is fairly common in Lake Nipigon, 76,666 pounds having been taken from 1918 to 1922 inclusively"
- harvest of 91000 pounds of sturgeon in 1925, this harvest combined with the previous years harvest of 93000 pounds resulted in a population crash

Adolph King, 1971

1925

noted the sturgeon trade with the natives of Lake Nipigon

Ontario Ministry of Natural Resources, 1980

the Pigeon Timber Company was in full operation in the Black Sturgeon area

1926

Annual Report of Department of Game and Fisheries, 1926

Stocking Data

- Nipigon River 149400 speckled trout fry and fingerlings 5000 speckled trout fry and fingerlings - Stewart Lake 10000 speckled trout fry and fingerlings - Frazer Creek 10000 speckled trout fry and fingerlings - Gravel River - Castle Lake 5000 speckled trout fry and fingerlings 5000 speckled trout fry and fingerlings McKenzie Lake

300 Adult speckled trout 500000 salmon trout fry and fingerlings 20000 salmon trout fry and fingerlings 25000 salmon trout fry and fingerlings 15000 salmon trout fry and fingerlings 10400000 whitefish fry

 Nipigon River - Lake Nipigon Keemle Lake Lake Helen

Loftquist Lake Lake Nipigon

J.R. Dymond, 1926

- "in general, Lake Nipigon is a large, deep, cold-water lake of high oxygen, low free carbon dioxide, and high bicarbonate contents, with a hydrogen-ion concentration around 8.0 to 8.3"
- Orient Bay is more protected, with more silting and development of aquatic vegetation therefore different species are found here
- large numbers of saugers are found in Windigo Bay
- large numbers of sauger and round whitefish are found in Wabinosh Bay
- Gull Bay contains few whitefish and no lake trout, but considerable numbers of sturgeon, pike perch, pike, sauger, red horse and the shallow water cisco, (\underline{L} . \underline{artedi})
- Ombabika Bay contains a large number of species
- "species rare or absent throughout the greater part of the lake are common in Ombabika Bay, and species which, although found commonly elsewhere, do not reach a larger size, here grow much larger"
- particularly large perch are found in Ombabika Bay

- slightly turbid coloration of water in Ombabika Bay results in specimens of a much lighter colour
- Margariscus margarita machtriebi present only in Aviators' Bay, Lake Nipigon and Wabinosh Lake and Station Lake
- "The speckled trout is perhaps the most characteristic of the larger stream fishes, but it is not found in all of the rivers and is not confined to streams, being found in considerable numbers in the lake"
- numbers of walleye remain in the streams after spawning until the middle of July, when they pass into the lake
- largest fish taken in trapnetting on the Pustagone River were speckled trout of lengths 15½, 10, and 6½ inches
- speckled trout were very much more common in Trout Creek than in Pustagone River
- specimens ranged from 6 to 16½", averaging 12" in length, larger fish were unable to enter the net
- "whitefish are of excellent quality and stand first in point of quantity produced and monetary value"
- lake trout are considered by the fishermen to be improving in quality since the lake has been fished commercially
- Dymond believes sturgeon will be rapidly depleted unless some means of artificial propagation is developed due to slow rate of growth
- consider suckers and ling an economic loss, reducing the productivity of whitefish and lake trout
- the yield for the first few years of commercial fishing may not be maintained indefinitely
- 39 species of fish found in Lake Nipigon
- the Lake Nipigon fish fauna resembles that of L. Superior closely
- "the regions where good speckled trout fishing is still to be had are annually growing fewer, and efforts to restock the streams have often given disappointing results"

Ritchie and Black, 1988

- 525000 brook trout eggs from approximately 188 females were taken to the hatchery from West and South Bay
- 309000 eggs from approximately 110 females were taken from spawning beds near Nipigon House.

Near, 1982

- The Hydro Commission built the proposed control dam at Virgin Falls creating the largest storage reservoir (L. Nipigon) in existence at that time, with a capacity of 6,700,000 ac ft.
- this raised the lake by 1.33'
- 2 more generators at Cameron Falls bring the total number to 6 units producing 75000 horsepower

German, 1968

1926

a minimum daily flow of 2080 cubic feet per second occurred on September 4, 1926

1927

Annual Report of Department of Game and Fisheries, 1927

- 30000 speckled trout fry and fingerlings -Nipigon River 10000 speckled trout fry and fingerlings -Stewart Lake 10000 speckled trout fry and fingerlings -Frazer Creek 10000 speckled trout fry and fingerlings Castle Lake 17000 speckled trout fry and fingerlings McKenzie Lake 945000 salmon trout fry and fingerlings Lake Nipigon 25000 salmon trout fry and fingerlings Keemle Lake Sturgeon Lake 200000 pickerel Lake Nipigon 8000000 whitefish fry

- Highway 17 completed to Nipigon

19th Annual Report of the Hydro Electric Power Commission, 1927

surveys made to determine maximum water levels that may be obtained without extensive land damages

records of lake elevation, inflow and outflow, are being

kept

a level of 855' in Lake Nipigon proposed to be maintained in 1930

T. F. Waters, 1987

the pre-Hydro level of Lake Nipigon was 822 feet above sea level

1928

Ritchie and Black, 1988

- 637000 eggs from approximately 228 females were taken from spawning beds in the West and South Bays of Lake Nipigon 25000 brook trout fingerlings stocked in Lake Nipigon.

> Annual Report of Department of Game and Fisheries, 1928

Stocking Data

65000 speckled trout fry and fingerlings -Nipigon River Lake Nipigon 25000 speckled trout fry and fingerlings -10000 speckled trout fry and fingerlings - Stewart Lake 25000 speckled trout fry and fingerlings - Frazer Creek 59

Stocking Data

1929

- 16000000 whitefish fry 1000000 whitefish fry Lake NipigonSturgeon Lake

 1000000 speckled trout eggs were taken from collecting field on Lake Nipigon to the Fish Culture Branch

R. Gollat, 1975

- the hunting season on caribou was closed

1930

Hydro News, 1943

- Alexander Landing plant was placed in service

- 3 generators = 54000 horsepower operated from remote control from Cameron Falls

M. E. MacCallum, 1989

 the movement of fish upstream from Lake Superior is blocked by the dam at Alexander Falls

- it also prevents the invasion of such species as sea lamprey

and salmon

walleye are the most abundant species on the river

R. Gollat, 1975

 gradual decline in commercial fishing noted in the early thirties

T. H. Hogg, 1931

- both a fish ladder and log slide provided at the generating stations
- fishways at both Alexander and Cameron Falls plants have been built according to the requirements of the Department of Game and Fisheries of the Province of Ontario

ladder-type, with the passage-ways at the intake end spaced

to suit varying levels of headwater

- this type is economical in use of water, the ports supplying the flow being under a head of not more than 18" at any time with velocity not exceeding 10'/sec as this is considered the most velocity at which fish can migrate

- v shaped wooden log chute was also built

Ritchie and Black, 1988

- 30000 speckled trout fingerlings stocked in West Bay
- 894000 eggs were removed from West Bay in spawn-taking operations
- 322000 eggs were removed from South Bay

MacDiarmid et al., 1930

1930

"the Nipigon River, the upper and middle portions of which have been greatly modified and, in the opinion of many, ruined by power dam development"

1931

Ritchie and Black, 1988

- 1930000 brook trout eggs taken from West Bay
- 654000 South Bay

Annual Report of the Department of Game and Fisheries, 1931

Regulations on Lake Nipigon

- gill nets authorized in the licence shall not be set, placed, or located within 1000 yds of the mouth of any tributary, river, creek, or stream, nor within 2 miles from Virgin Falls, and no nets shall be set on speckled trout spawning grounds, or on grounds set aside for the taking of spawn by the Department: namely West Bay, Chief Bay, Ombabika Bay, Black Sturgeon Bay, south of long point in South Bay and those waters lying east of a line drawn from one mile west of Poplar point to one mile west of High Hill river, or in other waters as directed
- Regulations on Lake Superior

Nipigon Bay, closed permanently

Ritchie and Black, 1988

Port Arthur hatchery staff collected spawn from approximately 689 adult females on the West Bay spawning area and from 234 on the South Bay spawning area

1932

Ritchie and Black, 1988

- 2,487,000 eggs from 888 females were removed during spawntaking operations from West and South Bays
- sports fishing permits discontinued (Ontario Game and Fish Act 1933)

R. Gollat, 1975

- 75 caribou are reported to have been delivered to Tashota (20 miles northwest on Lake Nipigon) from Flin Flon, Manitoba
- these animals were believed to have dispersed to the Onaman area and the islands of Lake Nipigon
- believe that the Nipigon-Onaman herd and possibly the Armstrong caribou herd as well, use the Lake Nipigon Islands for summer calving to escape predation

24th Annual Report of the Hydro Electric Power Commission, 1932

1932

- heavy precipitation resulted in Lake Nipigon water levels raised 2 feet
- logs in dam at Virgin Falls have been jacked down very much tighter in order to cut down the river flow
- 1,668,000 brook trout eggs taken from West Bay

- 525,000 South Bay

1933

R. Gollat, 1975

- population of 953 in village of Nipigon

- shipment of Elk (Wapiti) arrived at Nipigon-Onaman Crown Game Preserve

- this 835 square mile preserve was established east of Lake Nipigon; there was no trapping or hunting thus its main purpose was thought to be for protection of furbearers

Annual Report of Department of Game and Fisheries, 1933

Stocking Data

- 250000 speckled trout fry and fingerlings - Nipigon River
21267 speckled trout yearlings - Nipigon River
5000 speckled trout fry and fingerlings - Caribou Lake
5000 speckled trout fry and fingerlings - Clearwater Lake
3000 speckled trout fry and fingerlings - Cliff Lake
75000 speckled trout fry and fingerlings - Frazer Creek
5000 speckled trout fry and fingerlings - Gravel River

- 200000 lake trout fingerlings 3000000 whitefish fry Lake NipigonLake Nipigon

1933 Goodier, 1982

 facilities at Port Arthur hatchery became devoted to the cultivation of whitefish and lake trout

Ritchie and Black, 1988

- Dorion Hatchery was constructed and annual spawn taking was no longer needed from wild stocks as the broodstock was kept at the facility
- 878 adult brook trout taken from West Bay, Lake Nipigon to Dorion Fish Culture Station for brood stock

Annual Report of Department of Game and Fisheries, 1934

1934

Stocking Data

- 400000 speckled trout fry and fingerlings - Nipigon River
300000 lake trout fingerlings - Lake Nipigon
5000 speckled trout fry and fingerlings - Gravel River
10000 speckled trout fry and fingerlings - Keemle Lake
230000 speckled trout fry and fingerlings - Lake Nipigon

1934-1937

E.W. Mills, 1985

- "the pool above the dam at Virgin Falls is known to hundreds of fly fishermen. Many a man has cast over it in vain. Yet he knows they are there, too well fed though and often too well educated, to take a fly"
- Mills caught a 6 pound 11 ounce speckled trout while going through Miner's Rapids
- he sent the fish to a friend and the trout won the Pickford Trophy for that year
- they had no luck fishing in Rabbit Rapids
 Victoria Rapids was also a good trout spot
- a lumber camp was located just past White Chutes
- "Yes, the Old Nipigon, is still the queen of the trout rivers and the passing years have scarcely dimmed her luster. Today of course, you want to post yourself as to the condition of the river, water levels, logs, etc., before you make your trip".

1935

Annual Report of Department of Game and Fisheries, 1935

- Elk (Wapiti) nothing reliable stated as to the success or otherwise of the importation experiment
- 164000 speckled trout fry and fingerlings Nipigon River
 3000 speckled trout fry and fingerlings Clearwater Lake
 6000 speckled trout fry and fingerlings Gravel River
 15000 speckled trout fry and fingerlings Loftquist Lake
 100000 speckled trout fry and fingerlings Lake Nipigon
 50000 Lake trout fry Lake Nipigon

1936

Ontario Ministry of Natural Resources, 1980

 Lake Sulphite Pulp and Paper Company constructed a groundwood mill in Nipigon and started construction on the pulp and paper mill in Red Rock

Stocking Data

56800 speckled trout fry and fingerlings - Nipigon River 6000 speckled trout fry and fingerlings - Gravel River 2000 speckled trout fry and fingerlings - L. Ozone Creek 5000 speckled trout fry and fingerlings - Loftquist Lake 12000 speckled trout fry and fingerlings - Ozone Waters

 more or less improvement in Elk in all instances save possibly among those placed in the Nipigon-Onaman reserve

1937

M. E. MacCallum, 1989

- construction of the highway bridge over the Nipigon River enabled the Trans-Canada highway to extend to Schreiber from Port Arthur
- Highway 11 (the road to Geraldton, along the east side of the river and lake) was built shortly after

Ontario Ministry of Natural Resources, 1980

 Lake Sulphite Pulp Company established a 40 man camp at McKirdy's Siding

Annual Report of Department of Game and Fisheries, 1937

Stocking Data

50000 lake trout fry and fingerlings - Lake Nipigon 50000 lake trout fry and fingerlings - McKenzie Lake

1938

Annual Report of Department of Game and Fisheries, 1938

- additional raceways were constructed at Dorion trout rearing station to increase carrying capacity of hatchery
- 193 adult brook trout taken from West Bay, Lake Nipigon for brood stock; also 250000 eggs from 89 females

Thunder Bay Museum Nipigon File

 Lake Sulphite Pulp and Paper Company closed the mill in Red Rock Ontario Ministry of Natural Resources, 1973

- first shipment of wood arrived at the Virgin Falls dam

only Abitibi had wood on the lake this year

- wood travelled through a sluice and then through a series of rapids extending all the way to Helen Lake (MacDonald, Miner's and Devils rapids)

Annual Report of Department of Game and Fisheries, 1939

Stocking Data

- 18000 speckled trout fry and fingerlings - Nipigon River 6000 speckled trout fry and fingerlings - Gravel Lake 1000 speckled trout fry and fingerlings - Little Paysplatt River

12000 speckled trout fry and fingerlings - Loftquist Lake 500 speckled trout fry and fingerlings - Mountain Lake 2000 speckled trout fry and fingerlings - Parsons Creek

50000 lake trout fingerlings - Lake Nipigon

1936-38

1938

rearing of large numbers of speckled trout in Ontario 1936 - 557270 1937 - 1167073 1938 - 2083538

1937-38 Mihailovic, 1973

- the summer of 1937 saw Abitibi men cutting boom timber that would be used in the first water drive on Lake Nipigon
- a five man crew started from Lake Helen building rock filled cribs and worked their way up towards Virgin Falls
- The first shipment of wood arrived at the Virgin Falls dam in September, 1938
- At this time, Virgin Falls was followed by a series of rapids that extended all the way to Helen Lake

1939 Near, 1982

- Highway 11 north from Nipigon was begun

 log drive at Cameron Falls consisting of 56200 cords of pulpwood used 2 sluices for 577 hours; another larger drive required one sluice for 1163 hours

Ontario Ministry of Natural Resources, 1980

1939

 Abitibi Pulp and Paper Company began major timber harvests
 the wood flows were driven down the Ombabika and Onaman Rivers to Lake Nipigon, boomed and towed down Lake Nipigon, and the booms were reformed on Lake Helen and towed to

Thunder Bay for processing

R. Gollat, 1975

from 1939 to 1963 the Ombabika River was used for log drives
 from 1939 to the early seventies the Onaman was also used

Annual Report of the Department of Game and Fisheries, 1940

Stocking Data

Nipigon River 240 Adult speckled trout 58400 speckled trout fry and fingerlings -Nipigon River 500 speckled trout fry and fingerlings -Clearwater Lake 4000 speckled trout fry and fingerlings - Dublin Creek 1000 speckled trout fry and fingerlings - Firehill Lake 6000 speckled trout fry and fingerlings - Frazer Creek 3000 speckled trout fry and fingerlings - Gravel Lake 6000 speckled trout fry and fingerlings - Gravel River 18500 speckled trout fry and fingerlings - Loftquist Lake 500 speckled trout fry and fingerlings - Mountain Lake 2900 speckled trout fry and fingerlings - Ozone Creek 4000 speckled trout fry and fingerlings - Parsons Lake Squaw Creek 3000 speckled trout fry and fingerlings -Loftquist Lake 800 Adult speckled trout 300 Adult speckled trout Squaw Creek Trout Creek 300 Adult speckled trout

1940

33rd Annual Report of the Hydro Electric Power Commission, 1940

- United States agreed to additional flow over Niagara Falls therefore diversion of waters from the Albany River System into the Great Lakes system approved
- construction Ogoki diversion began

1940's

L. Townes, 1972

- aerial spraying with DDT against the spruce budworm throughout the area
- some localized users up till the mid 1960's
- the south shore of McIntyre Bay is considered the best habitat for waterfowl on Lake Nipigon

R. Gollat, 1975

1940 - 1950

 logging operations were on the east and west shores of Shakespeare Island

- limited saw log operations were also conducted along the

north-west shore of Kelvin Island

1941

Annual Report of Department of Game and Fisheries, 1941

Stocking Data

- 55600 speckled trout fry and fingerlings - Nipigon River 3000 speckled trout fry and fingerlings - Buckaday Lake 13200 speckled trout fry and fingerlings - Gravel River 4000 speckled trout fry and fingerlings - Jackpine River 15000 speckled trout fry and fingerlings - Loftquist Lake 4000 speckled trout fry and fingerlings - Mountain Lake 4750 speckled trout fry and fingerlings - Ozone Creek 2900 speckled trout fry and fingerlings - Parsons Lake

Tourism pamphlet, 1941

"In addition to brook trout there is bass, lake trout, rainbow trout, walleyed pike and great northern pike fishing. Famous fishing places include: St. Ignace Island, Black Sturgeon River, Jackfish, Jackpine, and Gravel Rivers and Lake Nipigon."

1942

Ontario Ministry of Natural Resources, 1980

Elk - little improvement reported

- the Sulphite Pulp and Paper Company was purchased by Brompton Pulp and Paper Company

Dupuis, Pers. Comm.

 debris deposited near the mouth of Stillwater Creek where the old sawmill (for railway tie production) and the groundwood mill (Brompton operated) were located

> Nipigon Gazette June 24, 1981

"Brompton Pulp and Paper Company came to Nipigon looking for a woods office to use in connection with the procurement of wood pulp for the paper mill across the Bay which they had acquired and were re-activating. The old Lake Sulphite Mill had come to life again." 1943 McIntyre, 1981

 in July 1943 the Ogoki Diversion was put into operation at a cost of \$500,000,000.

- the first phase of the project resulted in a dam being constructed at Waboose Falls on the Ogoki River which at that time flowed west to east, north of Lake Nipigon, draining into the Albany River which flowed north into James
- the Waboose Dam along with two earthen dams raised the water level 40 feet, diverting it across the height of land into the Great Lakes Watershed

Near, 1982

- Ogoki diversion under operation to increase the water available for power generation on Nipigon River by 50%, from 8000 to 12000 cubic feet per second (cfs)
- the Ogoki River flows into the Albany River about 250 miles west of Fort Albany on James Bay
- located 120 miles up the Ogoki River is the Waboose Rapids, site of the main diversion dam
- an excavated channel and the Summit Dam control the flow of diverted water
- this water then flows through a series of lakes, then into the Little Jackfish River
- the Little Jackfish River changes from a minor stream to an excavated soft wide channel with a much greater flow therefore erosion
- erosion rate would increase substantially with 10000 cubic feet per second additional flow
- recognized need for extensive channel improvements due to
 - 1) overall slope instability
 - 2) scouring banks steepen, slopes unstable, landslides
 - 3) undermining underground erosion of silts and fine particles
- the Ogoki River diversion provides a drainage area of: 5245 square miles of the total 14730 square miles in the Nipigon River drainage area
- under the present Ogoki regulating rule, diversion of up to 11000 cfs depends on
 - a) the level of the Ogoki Reservoir
 - b) the level of Lake Nipigon

- when the maximum Ogoki Reservoir level (1,037.66') is reached, water is diverted through the Waboose dam into the

when the Lake Nipigon water level is below 854', up to 11000 cfs can be diverted from the Ogoki down the Little Jackfish

when Lake Nipigon reaches 854' the flow is restricted to

- when it exceeds 854.5' the diversion flow is cut off completely

1943

Day et.al., 1982

closure of the Waboose dam created an 89 square mile "mixed" river and lake type impoundment comprised of a 30 mile stretch of Ogoki River valley and Mojikit Lake

- Water levels raised approximately 10 feet on Mojikit Lake,

compared to a maximum of 40 feet on the Ogoki River

below the Waboose dam, flow prevention exposed much fast water habitat important for fish shelter and fish food production

the dam prevents downstream nutrient transfer and disrupts

fish spawning and migrations

McIntyre, 1981

the Ogoki Reservoir has seen a tremendous increase in the walleye population since its inception

Holmes, 1976

found that increased loading of suspended sediments from the Little Jackfish with resultant increased levels of sediment deposition in Ombabika Bay does not limit bottom organisms to the extent that the balance of the natural food chain is disrupted

determined that turbidity did not limit zooplankton production to the extent that it would hinder fry survival

through lack of a major food source

the increased turbidity may make environmental conditions more conducive to the survival of sauger over walleye

1945

German, 1968

from 1945 to 1965, 90 gallons of DDT EM-2 emulsifiable concentrate per year was used to control blackfly larvae

Addison, 1945

- 63,600 pounds of DDT were used in experimental forest spraying in an attempt to control the spruce budworm in the Lake Nipigon area

Lambert and Pross, 1962

1945

- because of the urgency of the spruce budworm problem the Department of Lands and Forests continued its tests (on DDT) in 1945 on a much wider scale, using three R.C.A.F. Canso amphibious aircraft to spray two blocks of timber covering 64,000 acres southwest of Lake Nipigon

37th Annual Report of the Hydro Electric Power Commission, 1945

Alexander extension (unit #4)

- total energy available on Nipigon River brought to 148000 hp

- concern over other uses of water resources

"conservation implying the maintenance and where possible, the improvement of the regimen of the flow of all power producing rivers"

- Alexander development designed for 4 units, 3 were installed

in 1930, the 4th in 1945

Ontario Ministry of Natural Resources, 1980

 the construction of the Red Rock mill was completed and began production as an unbleached sulphate (kraft) pulp mill

1946

Ritchie and Black, 1988

- 86000 eggs were removed from 31 female brook trout in South
- 985 adult brook trout were stocked in Lake Nipigon

38th Annual Report of the Hydro Electric Power Commission, 1946

- due to increased water flow from the Ogoki, studies of Lake Nipigon proceeded throughout the year
- rip-rapping of CNR trackage at Orient Bay was completed in anticipation of increased high water to 855 feet in Lake
- the log slide installed at Alexander development, proved very satisfactory in operation

Ontario Ministry of Natural Resources, 1987

 the Department of Game and Fisheries was incorporated into the Department of Lands and Forests and was renamed the Division of Fish and Wildlife

Dan Gapen Sr., 1989

"visualize those enormous schools of spawning, speckled trout finning their way across the gravel and rock shoals of English Bay (Lake Nipigon). Huge trophy fish numbering in the hundreds, driven by an urge to reproduce. Fish coloured in scarlet reds and fluorescent purples weighing, in many cases, near eight pounds or more"

1948

Ritchie and Black, 1988

297500 eggs were taken from 106 female brook trout in West Bay in spawn taking operations

M. E. MacCallum, 1989

black fly control program undertaken to alleviate this pest for people living at Cameron Falls

this consisted of dripping D.D.T. directly into any creek within 8 km of the community twice a week during black fly season

Frazer Creek was treated at 3 stations

this program was discontinued in the late 1960's due to harmful effects associated with DDT

R. Gollat, 1975

Kelvin Island noted as a first class moose range

Hydro Electric Power Commission, 1950

construction camp at Pine Portage housed 1300 workers from 1948-1950

Kelso et al., 1977

groundwood pulp mill added to Red Rock mill

Regier and Hartman, 1973

- nylon introduced into gillnets some time between 1948 and 1953 resulting in stronger and more versatile nets
- this resulted in the same amount of effort expended to harvest a considerably larger catch

1949

the largest northern pike taken in North America during 1949 season 17.095 kg, length 128.27 cm, girth 62.23 cm caught at Bill McCollum's Reflection Lake Camp on Orient Bay, Lake Nipigon

Times Journal December 30, 1950

 Lake Superior fishermen netted 2,477,734 pounds of fish worth \$ 390,736

Ontario Ministry of Natural Resources, 1980

- Great Lakes assumed operations from the Pigeon Timber Company
- the groundwood mill in Nipigon closed

1950

42nd Annual Report of the Hydro Electric Power Commission, 1950

- first two units of Pine Portage Generating station in operation on Nipigon River, 10 miles south of Lake Nipigon
- located between Lake Nipigon and Cameron Falls plant
- on its completion 240' of the total 250' fall from Lake Nipigon to Lake Superior will be developed

M. E. MacCallum, 1989

- this dam acts as a complete barrier to migration along the upper river
- flooded out Virgin Falls and therefore dismantled the dam located there
- flooded Lake Hannah forming Forgan Lake
- flooded all the noted rapids upstream to Virgin Falls; White Chute, Victoria Rapids, Devil, Rabbit and Miners Rapids
- "with the construction of the dam at Pine Portage in 1930 most of the prime brook trout habitat was flooded out, the popular locations for brook trout fishing moved. Fishing concentrated at Virgin Falls, below Pine Portage to Jessie Lake, below Cameron Falls, and along the lower river".

Lawrie and Rahrer, 1972

 these authors believe that the collapse of whitefish fishery in Nipigon Bay is due to over fishing and sea lamprey predation

Dupuis, Pers. Comm.

 in 1950, Dan Gapen guaranteed his guests at the Chalet Bungalow Lodge a 20 lb. lake trout

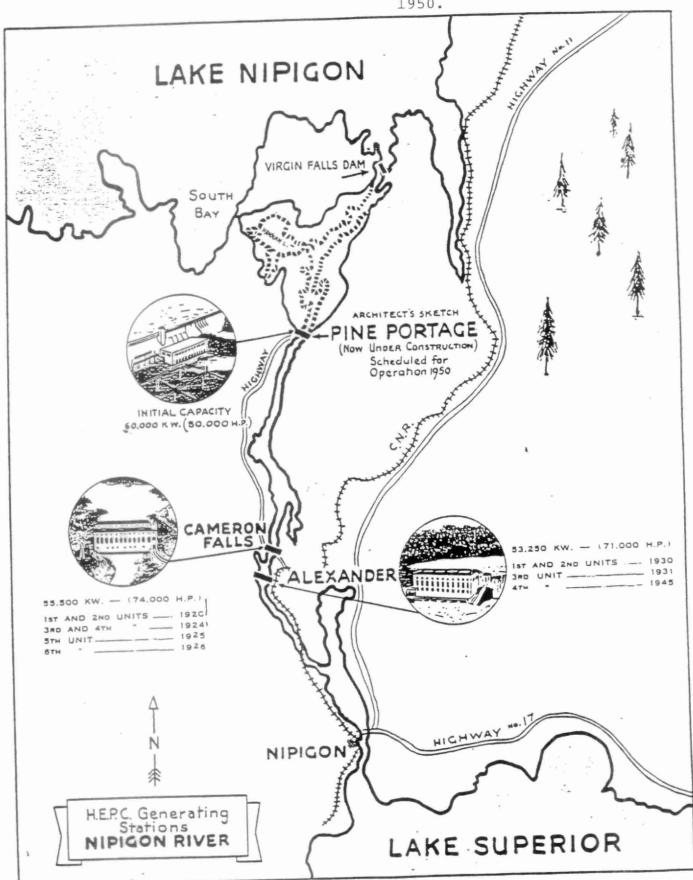
Table 4. Hydro-electric development on the Nipigon River.

Year Development	
1920	Cameron Falls dam and generating stations, 4 units
1926	Cameron Falls extension (Units #5 and #6)
1926	Virgin Falls storage dam
1930	Alexander dam and generating station, 3 units
1945	Alexander extension (Unit #4)
1950	Pine Portage dam and generating station, 2 units
1950	Virgin Falls dam flooded out, partially removed to aid navigation
1954	Pine Portage extension (Units #3 and #4)
1958	Cameron Falls extension (Unit #7)
1958	Alexander extension (Unit #5)

Source: Near, 1982.

Figure 8. Map illustrating the Hydro-electric Power Commission generating stations on the Nipigon River.

Source: "Pine Portage Generating Station: Nipigon River", 1950.



42nd Annual Report of the Hydro Electric Power Commission, 1950

1950

- construction cost of the Pine Portage dam \$26,300,000

road from Nipigon to Cameron Falls extended to Pine Portage
 Highway 585

population of 1897 people in village of Nipigon doubled

since 1933

 construction of 10 new houses and 7 families formed the nucleus of the new Lake Helen Reserve

sewage treatment plant built by the 1940's or early 1950's,

outflows were relocated to the present site

 problems with algal blooms and declining fish populations in the Lagoon before the plant was built

- massive dam; total length 3000', maximum height 140'

- powerhouse (286' long) located at base of the dam on the west bank
- after discharge from the powerhouse, the water is returned to the river below Pine Rapids by means of a 600' tailrace discharge capacity of 42000 cubic feet/sec

- water in river above dam raised by 100' to the level of Lake

Nipigon to create a headpond

- a slide of timber construction was built but it was damaged by ice and snow build-up in March 1959

Ontario Ministry of Natural Resources files, Nipigon District

- 15000 lake trout aged 12 months stocked at Pine Portage 3000 brook trout aged 12 months stocked at Cameron Falls 1200 brook trout aged 36 months stocked at Cameron Falls 3000 brook trout aged 12 months stocked at Pine Portage 36000 brook trout aged 6 months stocked at Pine Portage 1200 brook trout aged 36 months stocked at Pine Portage
- the first chainsaws, skidders and other mechanized logging equipment were introduced

Ritchie and Black, 1988

- 280000 fingerlings were stocked in Windigo Bay, Lake Nipigon

early 1950's

Dan Gapen Sr., 1989

- "heavy predation accidentally inflicted by commercial netters and an increase in sports fishing had begun to take their toll" on the brook trout fishery

- 4000 brook trout aged 12 months stocked at Alexander Falls
- 4000 brook trout aged 12 months stocked at Cameron Falls
- 60000 lake trout yearlings stocked at Shakespeare Island
- Ombabika Bay opened for commercial fishing resulting in higher catch per unit effort of spring pickerel

R. Gollat, 1975

- 399,787 pounds of yellow pickerel taken making it the peak year harvest
- 40,920 pounds of northern pike making up the peak year harvest

E. W. Mills, 1985

- "the Ogoki River below Waboose Dam is one of the most difficult spots to reach, one of the hardest to navigate and one of the most alluring to fish for speckled trout in the whole of the Albany basin"
- speckled trout difficult to take but of excellent size on

the Ogoki

 Indian guides charge \$10.00 per day plus food; they supply canoe and motor and you must supply gas

- plane fare was \$1.00 per mile

- starting at Lake Nipigon, the finest place to catch speckled trout is around the islands above the first falls
- Ed recommends the shoals along and between the islands on the outer or northern edge of the groups above Virgin Falls, because the prevailing westerly winds blow food in this direction - "that's where the fish are".
- "There is also a good spot in West Bay where the big speckled trout come in to spawn in September".
- "The pool above Virgin Falls is an historic one. Long before the present dam was built it was famous for its big trout. The Indians took tons of trout from this pool for dog feed! Today this water is so heavily fished that the trout are very wary. They lie right up against the boards of the dam, below the swift current and in a short of backwater. They are visible at times but extremely hard to catch."
- "Virgin Falls produces trout more consistently than any other spot on the Nipigon".

- Rabbit Rapids is a natural speckled trout pool

- Miner's Rapids and Victoria Falls are also good fishing holes
- "Fish all seem to run about four pounds and you will lose six to one you can land"
- "Pine rapids consists of three long miles of white water with many good spots for casting

- "Hamilton Pool at this spot is a famous fish place"

- "big pike may be taken from the pool on the right hand side at the foot of Smooth Rock Portage"

- "several trout may be taken below White chutes"

"the rest of the lower river including Split Rock, has not paid off for me. There are fish usually along the edges of the log booms"

1952

H. W. Welch, 1952

the whitefish in Lake Nipigon are affected by the tapeworm,
 Triaenophorus crassus

adult tapeworms in the intestinal tract of the pike release their eggs at a time which coincides with the pike spawning in the spring. These eggs hatch to produce free-swimming ciliated larvae (procercoid), which are in turn ingested by

copepods

- if a coregonine fish swallows an infected copepod the procercoid is released in the gut of the coregonine. The larva then moves from the gut to the musculature of the fish where it becomes encysted. In the course of pike predation on coregonids the tapeworm is transferred back to its definitive host, and, as an adult, produces its eggs, thus completing its life cycle

- the cysts found in the whitefish greatly reduce their

commercial value

Ritchie and Black, 1988

- 6000 sub-adult brook trout stocked in the Sturgeon River

Ontario Ministry of Natural Resources, 1980

- the St. Lawrence Corporation took over the Red Rock mill

1953

Ritchie and Black, 1988

 110000 brook trout eggs were removed from 39 females in West Bay.

Ontario Ministry of Natural Resources files, Nipigon District

- 4000 brook trout aged 6 months stocked at Cameron Falls 2000 brook trout aged 12 months stocked at Pine Portage 4000 brook trout aged 6 months stocked at Pine Portage 55000 lake trout yearlings (10000 at Shakespeare Island rest unknown)

T. F. Waters, 1987

1953

- from 1953-62 sea lamprey caused trout population in Lake Superior to drop more than 25% per year

Dupuis, Pers. Comm.

- Dupuis and Gapen were fishing one evening and captured 60 walleye with 60 casts near the Nipigon highway bridge; illustrates the abundance of walleye on the Nipigon River during this time period
- one could catch their limit of six walleye in half an hour on the lower Nipigon River

1954

46th Annual Report of the Hydro Electric Power Commission, 1954

- Pine Portage Extension (units #3 and 4)
- this extension makes it the largest of the Hydro Electric Commission's three generating stations on the Nipigon River

Kelso et al., 1977

- the original paper machine was converted to the production of newsprint from groundwood (semi-chemical sulphite pulp)
- a paper machine was added for the production of kraft linerboard at the Red Rock mill

Ritchie and Black, 1988

 150,000 eggs were removed from approximately 54 female brook trout during spawn taking operations

Ontario Ministry of Natural Resources files, Nipigon District

- minimum 15" total length on commercially caught yellow pickerel (closed season April 15 to May 23)
- whitefish and lake trout closed from Sept. 25 to Oct. 31 with 1 pound round weight limit for those caught commercially
- Lake Nipigon closed to commercial fishing from Oct 5 to Oct
- 42000 lake trout fingerlings stocked in Lake Nipigon

1955

R. A. Ryder, pers. comm. to M. E. MacCallum

smelt established on river by mid 1950's

Ontario Ministry of Natural Resources files, Nipigon District

6000 brook trout aged 12 months stocked at Alexander Falls 5000 lake trout aged 6 months stocked in Jessie Lake

Sea Lamprey Control Centre, files

- electrical barrier in place on Jackfish River resulting in some walleye mortality

 - July 26, 1955 "upwards of 1.5 dozen pickerel killed" July 27, 1955 "30 walleye killed by electricity in field"
 - August 10, 1955 "56 pickerel trapped, 45 dead; 4 perch trapped; 2 common suckers trapped", fyke net used to trap upstream or downstream migrants"

1956

Goodier, 1982

pink salmon accidentally introduced at Port Arthur

Ontario Ministry of Natural Resources files, Nipigon District

- 1500 brook trout aged 12 months stocked at Cameron Falls
- 15000 lake trout yearlings stocked at Sand Point

Fisheries Research Board of Canada, 1956

- first annual meeting
- use of electrical barriers to prevent sea lamprey from reaching spawning grounds in streams

Ritchie and Black, 1988

400 adult brook trout stocked in Lake Nipigon

R. A. Ryder, 1956

- 1249 yellow pickerel were captured in nets on either side of an electrical lamprey weir in the Jackfish River between July 7 and August 11
- estimated an adult pickerel population of about 123,000 fish inhabiting Nipigon Bay and its tributary waters
- commercial fishermen required by law to take only those pickerel measuring over fourteen inches in length; size of their gill nets 4.5" stretched measure

Walroth, 1980 1956

A substantial walleye sport fishery in the mid to late 1950's existed primarily in Polly Lake and the Jackfish, Nipigon River areas

angling in the Nipigon Bay proper did not normally occur with walleye being taken incidental to lake trout

> Ontario Ministry of Natural Resources, 1984

stocking was discontinued in 1956

1957

Fisheries Research Board of Canada, 1957

- the discouragingly rapid increase in abundance of sea lamprey in Lake Superior continued in 1957

the following is a record of the take of spawning run individually on 30 streams in Lake Superior that were under control in each of the last four years:

1954 - 4922 spawning lamprey

1955 - 8823

1956 - 19099

1957 - 30069

- progress on the development of selectively toxic chemicals that will destroy larval sea lampreys in streams without injuring fish
- suggest intensive stocking of lake trout in Lake Superior

Sea Lamprey Control Centre, files

a report form from the electric lamprey barrier on the Jackfish River indicated: "Nets are not adequate to stop pickerel run. Barrier should either be removed or better nets installed." This note was taken on June 10, 1957 when approximately 600 walleye were electrocuted. Daily barrier reports were taken on the Jackfish River from 1955 to 1959.

> Ontario Ministry of Natural Resources files, Nipigon District

- yellow pickerel closed season in Lake Nipigon shortened April 15 to May 15 and minimum legal length dropped to 14" total length
- Lake Nipigon retained closed season from October 5 to October 31, all species

H.G. Cumming, 1958

1957

production declining for total commercial catch

1917 - 1926 = 15 million pounds 1927 - 1936 = 12 million pounds

1937 - 1946 = 9 million pounds

1947 - 1956 = 7 million pounds

- primary commercial species are whitefish, lake trout, pickerel
- lake trout percentage decreasing, pickerel increasing
 whitefish makes up 60% of the total catch; Lake Nipigon fishery produces \$123,000.00 annually

Dampier, Pers. Comm.

- in the 1950's and 1960's, commercial fishermen fished on the shoals in Nipigon Bay from Five Mile Point south along tha Clay Banks, from Ruby Creek inlet west past Hughes Point almost to Cook Point

> Hydro Electric Power Commission, 1957

- Cameron Falls extension Unit #7 capacity 76700 kw
- Alexander Extension Unit #5 capacity 60900 kw

R.A. Ryder, 1957

- angling data from the notebook of a Lake Nipigon outfitter,
 1952 1957
- speckled trout constituted only a very small portion of the total catch for the six year period
- Ryder thought this to be unusual as Lake Nipigon still produces good speckled trout fishing in season
- perhaps these anglers main targets were pike and walleye
- even fewer lake trout were taken than speckled trout

R. Gollat, 1975

120 square mile Lake Nipigon Islands Crown Game Preserve established

1958

Fisheries Research Board of Canada, 1958

- 9 Lake Superior streams were treated chemically to control larval lamprey, 8 successfully and one with only partial
- commission is now stressing the chemical method of control using halogen nitrophenols

- summary of those fish species captured on the Jackfish River during operation of the electrical lamprey weir:
 - walleye 97 some described as rotten
 - suckers 7,708
 - pike 5
 - perch 3
 - lamprey 63
 - brook trout 1

C. E. Perrie, 1959

- Macdiarmid Icing Plant was sold mainly because there is no other such government operated plant in Ontario and that it was poor policy to continue with this operation, also several thousand dollars worth of repairs were required and the venture lost money every year
- the fishermen benefit from the sale by being able to sell their fish wherever they wish, as well as being able to clear them from any point on Lake Nipigon

Goodier, 1982

 beginning in 1958 the walleye fishery on Nipigon Bay began to slump

Vander Wal et al., 1989

 a bleach plant and chemical recovery unit were added to the Red Rock mill

1959

Ontario Ministry Natural Resources files, Nipigon District

- arctic grayling stocked at Alexander Falls and Cameron Falls in 1959, with no reported success
- these fish were aged 12 months; total 990 grayling were stocked

Sea Lamprey Control Centre, files

- number of fish captured on the Jackfish River during operation of electrical lamprey barrier
- suckers 732 (June 30 July 22)
- walleye 1483 (June 30 Aug. 14)
- lamprey 242 (June 30 July 24)
- pike 1

Ontario Ministry of Natural Resources, 1980

 1357.5 hectares of land became the Lake Nipigon Provincial Park

R. Gollat, 1975

 the private firm of George Humby (Kemp Fisheries) took over the ice house at MacDiarmid from government agents

MacCallum and Selgeby, 1987

- much more restrictive measures have been placed on the commercial fishery in Lake Superior since the drastic decline of the major commercial fish stocks due to the sea lamprey in the late 1950's

1960

R. A. Ryder, 1968

 the decline and disappearance of walleye stocks in Nipigon Bay in the early 1960's was attributed to local pulp mill effluent pollution downstream from the spawning grounds

MacCallum and Selgeby, 1987

 these authors suggest that overfishing may also have contributed to the decline of walleye in Nipigon Bay

Fisheries Research Board of Canada, 1960

 barrier operations have been reduced and chemical operations have been expanded for the control of sea lamprey

M. E. MacCallum, 1989

 yellow perch have become common in Nipigon Bay, and subsequently on the river

Ontario Ministry of Natural Resources files, Nipigon District

- 50 brook trout aged 36 months stocked at Alexander Falls
- 50 brook trout aged 40 months stocked at Cameron Falls
- Commercial Fishing Regulations fall closed season (Oct 5 to Oct 31) on Lake Nipigon removed (section 60)
- Indians of Gull Bay, Whitesand Band, and McIntyre Bay Band permitted to fish commercially in Kaiashk Bay

- Ombabika Bay opened to commercial fishing from June 1 to April 14
- lake trout limited to 10% of total catch, by weight between September 5 and October 15

Vander Wal et al., 1989

- 67 tons of suspended solids was discharged into Nipigon Bay per day from the Red Rock mill

Mid 1960's

Dan Gapen Sr., 1989

- "a six pound brook trout became a catch of the past"
- average size of brook trout dropped to a mere 2 pounds or less

1960-62

B.H. Gibson, 1963

- walleye and brook trout are more easily located and caught than lake trout
- brook trout is more prized than the lake trout
- this study of the commercial fishery has shown no over harvest of age groups of lake trout that become vulnerable to gill nets
- recommend additional net yardage and/or new licenses be allowed on the lake. It is doubtful if much additional pressure would be exerted on the lake trout stocks
- harvesting more whitefish poundage may reduce Triaenophorus infestations making them of greater economic value
- discourage use of mesh smaller than 5½" so immature lake trout are not captured
- discontinue stocking of lake trout; not needed as the spawning facilities are excellent and reproduction adequate

1961

M. E. MacCallum, 1989

- Pink salmon first caught in the river in 1961
- Harkness and Dymond (1961) indicate that Lake Nipigon sturgeon are slower growing and have been over fished
- these factors are exemplified as a result of late maturity, infrequency of spawning, environmental degradation, dams, wood fibre sedimentation over bottom organisms, and disturbance of spawning

B.H. Gibson, 1963

1961

"reported declines in the catches of the species (lake trout), by both anglers and commercial fishermen"

catch curve constructed for the total lake trout sample indicates a normal age structure in the lake trout harvested; no evidence of over harvest exists

standard mesh size used for lake trout in Lake Nipigon is

513"

lake trout appear to spawn in both shallow and deep water suggest closure of commercial fishing during Sept. 24 to Oct. 25 to protect spawning stocks

> Ontario Ministry of Natural Resources, 1980

the St. Lawrence corporation was taken over by Dominion Tar and Chemical (Domtar)

1962

B.H. Gibson, 1963

Lake Nipigon lake trout spawn initially at age VII spawning occurs for at least a 4 week period from

approximately Sept 25 to Oct 20

depths from 2' to 30' or more are used for spawning

older age groups were well represented in the spawning population, youngest age group was VI, these fish were immature

1963

Fisheries Research Board of Canada, 1964

sea lamprey first recorded in Nipigon River

Great Lakes Fishery Commission Annual report, 1966

granular Bayer 73 tested as a possible tool and as a toxicant for estuarine larval populations

these granules spread on the surface of the water, sink rapidly, and release almost no chemical until they are on the lake or stream bottom

granular Bayer had little effect on bottom dwelling organisms with the exception of clams

Fisheries Research Board of Canada, 1963

1963

 sea lamprey ammocoetes found for the first time in the Nipigon River.

innovation in chemical treatment was made by using "Bayer-73" as a synergist to TFM (3 - trifluormethyl - 4 -

nitrophenol)

- when a small quantity of Bayer - 73 is added, only half the amount of TFM is needed to kill ammocoetes thereby reducing the cost of treatment

B.H. Gibson, 1963

- 9 brook trout caught during tagging study using trap nets smallest 2.0 pounds, total length = 17.25" age IV largest 5.7 pounds, total length = 23.1" average total length = 20.7" weight = 4.2 pounds

1964

Hydro Electric Power Commission, 1964

- effective means have been used for treatment of blackfly larvae-infested streams with DDT, by application both from the ground and from the air

R. Gollat, 1975

- peak year harvest of sauger with the commercial capture of 32,318 pounds

Sea Lamprey Control Centre, 1988

initial treatment for sea lamprey larvae using TFM and powder Bayer 73 on the upper Nipigon river

- used on the 12.9 km stretch of river between Alexander Falls and Lake Helen

- it is applied at the falls and carried downstream with the current
- Ontario Hydro required to reduce flow for 24 hours to 50 cubic meters per second
- moderate numbers of larvae seen and/or collected

German, 1968

 maximum daily flow of 22600 cubic feet per second ocurred on August 23, 1968

1965 R. Gollat, 1975

 both the Nipigon - Onaman and Lake Nipigon Islands Crown Game Preserves were abolished

 one exception was Geikie Island which was designated a Crown Game Preserve and a last vestige for the remnant caribou herd thought to exist on the islands

 islands hunted heavily for moose by local residents and outfitters after the opening

 the larger and more readily accessible islands, especially Shakespeare and Kelvin, were most heavily hunted

1966

Sea Lamprey Control Centre, 1988

- initial treatment for sea lamprey larvae on Cash Creek using TFM and Powder Bayer 73
- treated 23.5 km of stream
- treatment discharge 0.68 (cubic meters per second)
- moderate numbers of larvae seen and/or collected

Ontario Ministry of Natural Resources files, Nipigon District

- baitfish areas were established and became licenced

Hydro Electric Power Commission, 1966

- at concentrations used for black-fly control at Hydro Electric construction and operations projects in Northern Ontario, DDT has appeared not to be immediately harmful to wildlife
- "recent evidence has indicated, however, that DDT may have a cumulative deleterious effect on fish and aquatic organisms"

- began looking for a degradable alternative to DDT

 one organo-phosphorous larvicide testing produced high blackfly larvae mortality without noticeable adverse effects to fish and other stream life

German, 1968

 45 gallons of DDT was applied by Ontario Hydro to several streams in the vicinity of Cameron Falls to control blackfly larvae

1967 German, 1968

- domestic wastes from the townsite of Nipigon (population 2666) are discharged to the Nipigon River following primary treatment while those from Red Rock (population 1900) are discharged without treatment into Nipigon Bay - a population of smelt was discovered in Pasha Lake

 because of danger of this undesirable species reaching Lake Nipigon, it was decided by the Lake Nipigon Fisheries Management Unit to control the population in Pasha Lake

German, 1968

- "walleye has been considered the mainstay of the fishing industry in Nipigon Bay in the past"

"in the last decade, changes in the walleye population of Nipigon Bay have reduced this fishery from one of major proportions to a level where commercial exploitation is no longer considered to be profitable"

an unnatural taste of walleye flesh resulted in market

rejections

the commercial fishermen related this taste to wastes from

Domtar Newsprint Limited

 German found it "unlikely that the DDT blackfly control programme at Cameron Falls would have been responsible for the disappearance of walleye in Nipigon Bay"

"water quality changes in the vicinity of the Red Rock Mill have altered the bottom fauna from pollution intolerant to tolerant forms. The intolerant mayflies and amphipods are valuable food organisms which support game and commercial fish species, whereas pollution - tolerant sludgeworms are less desirable and favour the maintenance of coarse fish rather than game fish"

1968

Ontario Ministry of Natural Resources, files

- smelt were poisoned with a commercial rotenone preparation as they moved from Pasha Lake to Foxear Creek to spawn
- 15000 smelt were killed in an attempt to prevent them from reaching Lake Nipigon

Postupalsky, 1970

4 known Osprey nesting sites on Lake Nipigon

L. Townes, 1972

- 10 pairs of Osprey inhabiting Lake Nipigon

L. Townes, 1972

1968

 Lake Nipigon Fisheries Management Unit was established to monitor trends within the fishery, investigate problem areas and recommend corrective measures

this Unit terminated its function in 1973 as a result of the

Ministry's re-organization

Townes and Todd, 1971

 90,331 pounds of whitefish harvested during October 15 to November 15 amounting to \$17,163.00

Port Arthur News Chronicle, July 24/68

- Jim Meeks of Charleston, West Virginia caught a 23½"
speckled trout weighing 6 pounds 8½ ounces off the Nipigon
Bridge

1969

 140,682 pounds of whitefish harvested in Lake Nipigon during October 15 to November 15 amounting to \$30,950.00

A. H. Lawrie, 1978

 Ontario planted 78,000 yearling coho salmon in the Jackpine and Gravel Rivers between 1969 and 1971

Sea Lamprey Control Centre, 1988

 granular Bayer used as treatment for the "upper" Nipigon River by sea lamprey control centre (these treatments of the upper river began at Alexander Falls)

R. Gollat, 1975

 the Freshwater Fish Marketing Corporation, which is a Winnipeg based Federal Crown Corporation, became the buying agent through Kemp Fisheries

> Lake Nipigon Fisheries Management Unit files, 1972

- 2 pairs of brook trout observed spawning at 3½ and 4½ feet of water in West Bay

- 225 adult and immature walleye transferred from Wabinosh Bay to Roslyn Lake in Geraldton district
- 214 adult and immature walleye transferred to Wabinosh Bay to Frazer Lake in Port Arthur district
- brook trout tagging program initiated to determine strength of homing instinct of Lake Nipigon brook trout; movements of brook trout; area supported by each major spawning bed; and relative importance of each spawning ground
- South Bay and West Bay were the 2 best-known brook trout spawning areas in Lake Nipigon
- large numbers of small speckled trout were found in Ford Creek flowing into Albert Bay, off South Bay, Lake Nipigon

G. Holmes, 1975

 maximum discharge of 15880 cubic feet per second on September 4 from the Summit control dam on the Ogoki Reservoir

R. Gollat, 1975

- peak year harvest of yellow perch with 918 pounds taken

1970

Times Journal, September 3, 1970

- Art Jalkanen caught the largest speckled trout in Nipigon's Fabulous Fall Fishing Festival, it was 5 pounds 8 ounces
- this fish, as well as one weighing 4 pounds 14 ounces, was caught at Parmachene Rapids

Sea Lamprey Control Centre, 1988

- second treatment for sea lamprey control on the upper Nipigon River using TFM and powder Bayer 73
- treated same 12.9 km of river
- treatment discharge was 53 cubic meters per second
- moderate numbers of larvae were seen and/or collected

Postupalsky, 1970

- sampling by Postupalsky 1970, suggests that Lake Nipigon cormorants are experiencing reproductive difficulties due to eggshell thinning, associated with high DDE residues carried by the females
- bald eagles are also suffering reproductive failure
- 14 pairs of eagles produced only a single eaglet in 1970

L. Townes, 1972

1970

 12 pairs of Great Blue Herons are using a nesting area on McIntyre Bay

- "upper" river treated with granular Bayer

M. E. MacCallum, 1989

 sewage treatment plant over loaded therefore expanded and the chlorine contact time was increased

 the plant is considered to be effective at providing adequate primary treatment

> Hydro Electric Power Commission, 1970

 residents of Cameron Falls colony relocated to town of Nipigon 14 miles away

- moved houses from Cameron Falls to selected lots in Nipigon

Ontario Ministry of Natural Resources, files

 a brown trout 20 inches long was captured by a commercial fisherman in Lake Nipigon

R. Gollat, 1975

- Freshwater Fish Marketing Board became the buying agent for commercial catches - increased profits for the fishermen
- 2500 lake trout aged 12 months stocked at Jessie Lake

Ontario Ministry of Natural Resources, files

- Geraldton District Ministry of Natural Resources studying the homing instinct in native brook trout
- "it is hoped that the Lake Nipigon brook trout will be found to return reliably to its home grounds year after year for spawning. The most important grounds can then justifiably be protected or improved where necessary. New spawning populations can possibly be established to replace those that have disappeared over the years as a result of man's activity or natural processes.

yellow pickerel, pike and saugers are the only species listed which have at times exceeded the safe level of .5ppm of mercury

- saugers seem to be more prone to mercury accumulation

- 275 yellow pickerel transferred from below the rapids in the Wabinosh River to Keemle and Paddy Lakes in the Geraldton district

- fairly substantial spawning run of the lake whitefish in the Wabinosh River
- Breakwater Point in McIntyre Bay reported to be a brook trout spawning area but none were noted, on the contrary many lake whitefish were captured

- large smelt die-off occurred in Polly Lake

 double crested comorants present in large numbers on a small rock island in the north end of Lake Nipigon which they are using as a resting place

71,109 pounds of whitefish harvested in Lake Nipigon during

October 15 to November 15 amounting to \$16,355.00

 harvest of lake trout has dwindled to 12,050 pounds from a harvest of 600,000 pounds in 1919

1971 L. Townes, 1972

- 16 pairs of bald eagles produced only 2 eaglets

- waterfowl seen in McIntyre Bay by J. Todd and L. Townes in 1971 included: canada geese, blacks, mallards, blue wing teal, goldeneyes, scoters, mergansers and pintails
- 14,500 lake trout were stocked in Jessie Lake
- a second brown trout was reported by an angler

Sea Lamprey Control Centre, 1988

- granular Bayer treatment of lower river

Ontario Ministry of Natural Resources files, Nipigon District

- the commercial harvest of sauger between August 1971 1973 inclusively on Lake Nipigon was conditional with respect to methylmercury contamination
- by August 1971 the commercial licenses were amended to make them no longer valid for the taking of sauger

Leslie and Kelso, 1977

- "data therefore suggests that larval fish either were not greatly influenced by plume conditions of the Red Rock mill or were transients"
- these authors suggest that pollution was not a cause of the walleye decline from Nipigon Bay

Townes and Todd, 1971

- "the brook trout or speckled trout does not seem to be in any immediate danger in Lake Nipigon, although some areas have reportedly stopped producing as many trout as they did a few years ago" - "large trout between five and ten pounds are very rare in the anglers' catches"

"the greatest angling pressure on brook trout occurs in South Bay"

South bay

1972

Ontario Ministry of Natural Resources, files

 operating season emphasis placed on lake whitefish in 1972 due to the low harvest of 250,000 pounds in 1971

 in May 1972 at Creelman Creek, a tributary of the Sturgeon River, approximately 150,000 yellow pickerel eggs were collected and fertilized

- the green eggs were then planted in the Postagoni River

Ontario Ministry of Natural Resources, 1980

 three archaeologists were working for the Ministry of Natural Resources in Blacksand Park

Day et al, 1982

- Ontario Hydro entered into agreement with Gull River Indian Reserve 55 for construction (and maintenance until 1992) of a 9000 foot section of earth filled embarkment with rip rap protection to elevation 860' together with a cash settlement of \$16,500.

this was to compensate for the loss of 11 acres over a 40

year time span

Ontario Ministry of Natural Resources, files

- some causes noted by a local outfitter for the decline of lake trout and coasters in Lake Nipigon
- 1) draw down of lake levels, during the winter
 - netting in the coaster water especially during spawning season. Netting on the lake trout spawning grounds, and netting at the month of the Wabinosh which has just about wiped out the river spawning lake trout runs in that river
 - 3) log booms in the river and river mouths dropping many tons of bark on the bottom, covering the bottom feed and disrupting the ecology in general. The log drives in the river don't help the river trout.
 - 4) competition from coarse fish such as ling and suckers

- 5) increased pressure from anglers
- this outfitter notes a decline in brook trout and an increase in suckers and ling

Lawrie and Rahrer, 1972

- Lawrie and Rahrer suggested reasons for the collapsing stocks in Lake Superior
- they suggested that improvements in commercial fishing gear and equipment out paced the management system which typically controlled the fishery by the establishment of closed seasons and limits on fish sizes and the amounts of gear allowed

Schneider and Leach, 1977

- after a peak yield of 170,000 kg in 1966, the harvest of walleye in Black Bay dropped rapidly to 123,000 kg, 52,000 kg, and 9,000 kg in successive years and finally to nil in 1972

1973

Sea Lamprey Control Centre, 1988

granular Bayer treatment used on upper river

Annual Report 1973-74 Fish and Wildlife

- log drives ceased on the Nipigon River
- economic reasons as well as increasing public pressure for a cleaner environment have influenced the change from river driving to trucks hauling wood
- fall closure from October 15 to November 15 for ALL fishing, expected to protect whitefish during spawning
- the South Bay closed area was extended
- a water level of 849.61 above sea level was recorded in April
- this is the lowest water level recorded since 1941 being approximately 2 feet lower than normal

Conditions of Commercial Fishing Licence on Lake Nipigon 1973

- NOT VALID between October 15 and November 15
- 2) NOT VALID south and west of a line drawn from Otter Head to the southern tip of Prince of Wales Island, from that point to a point 1000 yards north of the overflow out of South Bay on the east shore of South Bay

- 3) NOT VALID from January 1 to August 31 (in that part of Wabinosh Bay lying west of a straight line drawn north and south from the eastern extremity of Inner Burn Island to the north and south shores of the Bay
- NOT VALID for the taking of sauger
- 5) restrictions as to the use of gill-nets under Section 42, Ontario Fishery Regulations applies also to use of trap and/or pound nets

Chronicle Journal, January/73

- Lake Nipigon Fishermen alarmed over catch drop
- Chief Hardy of the Macdiarmid Indian Band blames Ontario Hydro "things have been getting worse ever since Ontario Hydro built the Pine Portage dam way back in 1928"
- spokesman for the Ministry of Natural Resources stated that no conclusive evidence was found to prove Ontario Hydro at fault for the decline of fish rather he feels that overfishing is the cause of the poor harvest

Annual Report 1973-74 Fish and Wildlife

- 13 commercial fishing licenses issued on Lake Nipigon in 1973 of which 2 were Band licenses
- a total of 240,000 yards of gillnet and 9 trapnets were licenced with a combined quota of 1,270,000 pounds of whitefish, lake trout, sturgeon and yellow pickerel
- 127,131 pounds of whitefish were caught worth \$26,061.86
- total poundage caught of all species was 206,706 pounds worth approximately \$50,468.92
- the season was closed from October 15 to November 15
- the part of Lake Superior which falls in the Nipigon District contains 13 commercial fishing licenses
- a total of 96,000 yards of gillnet and 4 pound nets are licenced
- 58,357 pounds of whitefish were captured in this portion of Lake Superior valued at \$20,424.95
- the total value of \$32,688.37 was made on the total poundage (105,725 pounds) of all species
- the total poundage caught in the Nipigon District was 336,108 pounds worth approximately \$89,987.61
- began a trapnetting program to promote the harvest of suckers in Lake Nipigon
- study of the taxonomy of Lake Nipigon ciscoes undertaken by the U.S. Great Lake Fishery Laboratory
- largest speckled trout caught in Lake Nipigon Fish Derby was 8 pounds 2 ounces.
- the largest brook trout in the 1973 Nipigon Fish Derby weighed 9 pounds 9 ounces

The Times-News February 15, 1973

1973

- Much public opposition to government proposed reservoir that would result in flooding 14,000 square miles of land north of Lake Nipigon to help control water levels in the Great Lakes and to provide a supply of fresh water
- Dam the Dams Committee in Thunder Bay and MacDiarmid Indian band concerned over proposal
- the reservoir was never constructed

Kelso et al., 1977

 installation of an external treatment clarifier at the Red Rock mill for the removal of fiber from waste water

> Times-News July 30, 1973

- commercial fishermen with a lifetime of experience on Lake Nipigon remain firmly convinced that manipulation of water levels has had a profound effect on the spawning success of trout and whitefish
- "They feel Ontario hydro could be much more cooperative in providing optimum conditions for the hatching and survival of fish spawn"
- "Eggs have been left high and dry as witnessed by fishermen, in spite of denials from your ministry and Ontario Hydro".

1974

Sea Lamprey Control Centre, 1988

- lower river treated with granular Bayer from 1974 to 1978

Goodier, 1982

- first chinook salmon caught in Nipigon Bay at mouth of Dead River (weighing 11 kg or 24 pounds)
- perch fishery began in Nipigon Bay

Ontario Ministry of Natural Resources files, Nipigon District

- 5000 brook trout stocked at Cameron Falls
- 5500 brook trout stocked at Pine Portage

R. Gollat, 1975

- most spring fishing is carried out around Windigo Bay and North and South Peninsulas
- whitefish is the main species sought, with some pickerel and lake trout being caught as well

- as the water warms, the nets are fished deeper

- lake trout catch increases slightly about mid July

- from August 1st to September 15 th, an increase in shallow water lake trout and whitefish fishing effort increases production by approximately 30% for both species

later in the fall, whitefish and yellow pickerel are heavily

fished

northern pike is the most important species to the tourist outfitters with yellow pickerel running a close second

most of their effort is concentrated on brook trout from

break-up until mid June

favorite non - guided angling areas for speckled trout include Shakespeare Island, Mungo Park Point, Virgin Islands, South Bay, Gros Gap, West Bay, Jackfish Island and the north central islands area

Virgin Falls, which once offered excellent speckled trout fishing opportunities, has declined since the turn of the

century but still produces some fair sized trout

Mr. Odorizzi states that last fall (1974) and this spring they enjoyed excellent speckled trout fishing, the largest caught being 8 pounds 4 ounces, although the average fish caught in the fall is usually around 5 pounds and from 3 to 5 pounds in the spring

he also mentions catching quite a few lake trout incidental

to the speckled trout fishing

M. E. MacCallum, 1989 1975

brown trout caught in Nipigon River in 1974

Ontario Hydro cited by G. L. Holmes, 1975

"increased discharge into the lower 9 miles of the Little Jackfish River removed and estimated 30 million cubic yards of unconsolidated glacio lacustrine sediment between 1943 and 1972"

Day et al, 1982

"the pre-existing biological features of the lower river reach have been eliminated. Reestablishment is possible for a limited number of species capable of adopting to sustained scour, turbidity, and flow fluctuation stresses"

> Annual Fish and Wildlife Report, 1974/75

Nipigon District staff surveyed an area of 557 square miles of territory which resulted in an average corrected density of .72 moose per square mile

- the Lake Nipigon Islands, which have been closed to hunting since 1970, had a count of 84 moose which is a considerable increase
- study on the Summit Gripp area recommends that it be set aside from commercial development to protect the aquatic environment and waterfowl habitat
- Nipigon District stocked a total of 19 waters with brook trout (17500 fingerlings, 4980 yearlings, 1500 adults), five waters with lake trout (12000 yearlings) and one water with rainbow trout (500 yearlings) in 1974
- the total number of commercial fishing licenses declined from 13 to 12 in 1974 (2 being Band licenses)

- these consisted of 228,000 yards of gillnet

 increased production, along increased revenue, is noticeable over last year(1973)

- sauger was reopened to the commercial fisherman

355,516 pounds of fish were caught (value \$87,839)
 12 licenses comprising 98,000 yards of gillnet and one pound net are administered by the Nipigon District for that portion of Lake Superior

- 115,792 pounds were taken (value \$48,362.88)

- the 15 licenses on inland lakes captured 23,531 pounds (value \$6,948.00)
- the total poundage caught in the Nipigon District in 1974 was 495,039 pounds valued at \$141,339.90

Times-News January 11, 1974

 Pigeon, Pearl, Black Sturgeon, Nipigon, and Gravel Rivers slated for treatment as well as Lake Helen near Nipigon

Dr. Jim Tibbles of the lamprey control section said "the big headache" this year was the Nipigon River and Lake Helen. Because of their great volume, they are very difficult and expensive to treat.

"On a river the size of the Nipigon you might have to dump 15,000 pounds of chemical at a cost of four dollars a pound, it can get pretty expensive, and there's always the possibility you could lose the whole thing if you don't work it right."

1975

Ritchie and Black, 1988

- 54000 brook trout eggs were taken from West Bay to the Dorion Hatchery
- 1300 adult brook trout were stocked in the Sturgeon River

- found some evidence of caribou living on Black Bay Peninsula but St. Ignace Island seems barren of caribou
- 8 caribou seen in block around Onaman Lake; these groups were seen on the ice
- caribou occupying areas south of Whitewater Lake and around Ogoki Reservoir

other sightings and locations of caribou are listed in the

annual report

- the 12 licenses issued on Lake Nipigon were comprised of 228,000 yards of gillnets and 9 trap nets
- increased production and revenue is again very noticeable over the past year

409,470 pounds of fish were caught in Lake Nipigon with a value of \$142,278.37

the poundage and revenue of the Lake Superior portion

increased marginally over 1974

- a problem was encountered during 1975 with the Lake Superior commercial fisherman in that the lake trout quota for an area was filled and exceeded within one or two weeks of the opening date, therefore, no poundage was left for incidental
- a revision of zones and quotas is expected in 1976
- production and value of the inland fisheries more than doubled from that of 1974 due entirely to larger catches of suckers and whitefish

the total poundage caught was 594,082 pounds with a value of

\$204,046.35

the pink salmon ran in Nipigon District streams through the month of September, peaking about the 20th; the species appears to be strongly established along the north shore of Lake Superior

a total of 16 waters were stocked with hatchery reared trout

during 1975

- one thousand brook fingerlings and 5 thousand brook trout yearlings were stocked
- Frazer Creek was treated with Nox-Fish to try and eliminate smelt
- a 5 pound 5 ounce brook trout was the largest of 41 entered in the Nipigon Fish Derby

Sea Lamprey Control Centre, 1988

third treatment for sea lamprey control on the upper Nipigon river using TFM and powder bayer 73

treatment discharge 50 cubic meters per second

- low numbers of larval sea lamprey were seen and/or collected
- granular Bayer treatment used on upper river

1975 R. Gollat, 1975

- twelve commercial licenses issued on Lake Nipigon

- seven of the twelve are for maximum allowable 24000 yard gill net under Schedule 13, sub - section 2, Ontario Fisheries Regulations 1974
- all gill net licenses are for 4½ inch mesh
- three of the five 12000 yard licenses are also licenced for 3 trap nets as well
- each licence is for maximum allowable take of 25 tons of fish total (all species) per 12000 yards per year

Times-News May 28, 1975

- "Commercial fishermen on Lake Nipigon are not catching as many fish as they used to, in addition to complaining about low fish prices."
- blamed on overfishing rather than blaming fluctuation of the lake's level caused by Ontario Hydro dams which has decimated the fish population by exposing spawning beds

R. Walroth, 1979

- 14,500 lake trout stocked in Lake Jessie
- Lake Nipigon fishermen withdrew from the Freshwater Fish Marketing board, dissatisfied with price and arrangements, low harvest of whitefish, walleye in early 70's, highest in 1976
- 75 adult brook trout taken from West Bay, Lake Nipigon to Dorion Hatchery for brood stock

M. E. MacCallum, 1989

- rainbow trout were ignored by most fishermen until the mid 1970's (Dupuis personal comment)
- rainbow trout have now become the target species

1976

G. L. Holmes, 1976

- in studying the effects of the Ogoki diversion G. Holmes found an increase in the sauger:walleye ratio in Ombabika Bay
- turbidity favours the production of sauger over walleye and the commercial fishing gear is more selective for walleye
- also responsible for the increase in numbers of sauger was the ban on the sale of this fish due to high mercury levels
- the June 1, opening day for commercial fishing in Ombabika Bay was found satisfactory

- sediment deposits, in the area near the mouth of the Little Jackfish River since 1943 when the diversion first began operations, are about 30' in depth

 chemical analysis showed no irregularities that might be detrimental to the fish populations of Ombabika Bay

1977

Sea Lamprey Control Centre, 1988

- second treatment of Cash Creek for sea lamprey using TFM and powder Bayer 73
- treated 24.9 km of stream, discharge 1.1 cubic meters per second
- larval sea lamprey scarce

R. Walroth, 1979

 lake whitefish and walleye harvests were the highest of the decade in Nipigon District

R. A. Ryder, personal files

- "Returned to former spawning grounds to determine whether or not they were still being utilized by walleyes. No walleyes were seen despite the fact that during the 1950's as many as several thousand would be seen on a single night once the water temperature reached 4°C."
- "Spawning boulders were covered with a cladophora-like algae, water was more turbid and water levels were extremely low. Some small perch were seen close to the shore - a species not previously recorded during tagging operations in the 1980's."
- "The spawning ground conditions were indicative of increased upstream loadings - especially phosphates. The source is undetermined at this time."

D. Penney, 1976

- commercial fish catch study 1976 2 brook trout caught out of 15,531 fish (0.02%); 67.4% of whitefish were aged 7 and 8
- 14,500 lake trout stocked in Jessie Lake
- 70 brook trout taken from West Bay, Lake Nipigon to Dorion Hatchery for brood stock
- commercial fishermen caught a single smelt off Undercliff Island - 1st reported in Lake Nipigon - introduction probably occurred via the Poshkagogan, Gull, Wabinosh or Namewaminikan Rivers

- a herd of 13 caribou were noted adjacent to the Armstrong airport throughout January and February
- only 36 moose were counted during aerial survey of the Lake Nipigon Islands; this is a drastic reduction from the 84 moose spotted in 1974
- it is recommended that the season remain closed to legal hunting for at least another season

1976

Nipigon District Annual Fish and Wildlife Report, 1976/77

- a 8 pound 13½ ounce brook trout was the largest of 57 entered in the Nipigon Fish Derby
- 2 brown trout taken from the lower Nipigon River in the fall and winter
- one was taken by an angler and the other was taken in a gill net in Lake Helen
- common remarks of hunters were that the moose are getting fewer and the number of hunters are increasing
- the number of hunters increased 335 over 1975 while the harvest decreased 7%
- "Hopefully, a season beginning after the moose rut will decrease the kill and the hunting pressure."
- an estimate of 100 caribou made as the summer population on the northern islands in Lake Nipigon
- a few pink salmon appeared, unexpected for an even year
- a total of 13 licenses, comprising 228,000 yards gillnet and 9 trapnets, were issued for Lake Nipigon
- 2 were Band licenses
- increased production and revenue received are the highest since 1970
- the total poundage caught was 635,936 pounds valued at \$336,483.18 (the highest amount yet received)
- excellent prices were received in 1976
- all species showed a slight increase in poundage taken, however, the most prevalent was in the catches of whitefish and pickerel
- during 1976, western Lake Superior was broken up into new fishing zones resulting in each fisherman getting a zone and an individual Lake Trout quota
- a total of 13 licenses, comprising of 84,000 yards of gillnet and one pound net
- 2 of the 13 licenses were zoned for Nipigon Bay and the remainder for the outer St. Ignace Island area
- the catch per unit effort, production and monies realized
- all decreased considerably, primarily due to less fishing the total catch weighed 99,103 pounds and was worth \$41,019.50

- one experimental chub permit was issued and was quite valuable for the fisherman; this should result in an interest by others
- 12 licenses were issued for inland lakes
- 3 licenses were for sturgeon only (6000 yards), 5 were whitefish and coarse fish only (8000 yards and 1 trapnet) and 4 were regular gillnet licenses (total 12000 yards)
- total poundage taken for the District increased by approximately 230,000 pounds from 1975; monies realized increased by approximately \$225,000.00
- this huge increase is due entirely to the Lake Nipigon fishery
- stocking of Brook trout yearlings

Lake	Amount
Malverne	800
Limestone	500
Mountain	1200
Caro	1000
Forbes	1000
Stewart	210-tagged with Green B floy tags
Namewaninikan River	1000

1976

Ritchie and Black, 1988

- 41,500 brook trout eggs taken from approximately 15 females in West Bay
- the numbers on this spawning bed significantly decreased;
 689 females were used during spawn taking in 1931

Nipigon District Annual Fish and Wildlife Report, 1976-77

- reported that large numbers of perch were being taken by the angler and commercial fisherman from Nipigon Bay
- wild rice again harvested in Summit Lake by Shoal Lake Wild Rice Ltd.
- recommendations of the Ogoki Fisheries Study
 - 1) in an attempt to minimize future erosion and slumping along the Little Jackfish River, Ontario Hydro in consultation with the Natural Resources should arrive at a maximum allowable increase per day for water discharges through the Summit Control Dam. This would eliminate the sudden increase in flows of 0 to 12000 cubic feet per second in a matter of 2 or 3 days
 - 2) that the Ministry of Natural Resources reinstate the Lake Nipigon Assessment Unit in order that the lake will be managed for its optimum use

- in 1977, 3 licences on 2 lakes (Whitewater and Mojikit) were relinquished voluntarily by the commercial fishermen concerned
- reason for this due to the mercury content in the yellow walleye; this species could not be sold and, since approximately 40% of the catch was walleye, it was considered best to stop fishing
- agreement was made with the fishermen concerned that if it again becomes feasible to fish this species, a licence would be re-issued to that individual

1977 Ontario Ministry of Natural Resources, files

 66 adult brook trout taken from West Bay, Lake Nipigon to Dorion Hatchery

D. Penney, 1977

- harvest of lake whitefish from Lake Nipigon has declined from 1,620,970 pounds in 1919 to approximately 342,954 pounds in 1977

Ritchie and Black, 1988

- 91000 brook trout eggs taken from West Bay

Nipigon District Annual Fish and Wildlife Report, 1977-78

- 26 caribou sighted during aerial survey of Armstrong area
- the licences and yardage for commercial fishing on Lake Nipigon remains the same as 1976
- production and revenues received is slightly lower than in 1976 with the total poundage caught of 629327 lbs. worth \$303136.47
- Nipigon Bay (Zone 3) and outer St. Ignace Island area (Zone 4A) had a total catch of 221016 lbs., an increase of 81301 lbs. from 1976
- the increase in catch is due entirely to greater catches of chub in Zone 4B and of perch in Zone 3
- the licences and yardage remained the same for inland lakes
- total pounds caught in the District increased by approximately 72000 from 1976
- monies realized also increased by approximately \$10000.00
- these increases are both due primarily to the chub fishery developing on Lake Superior
- data collected over the past three years indicates that by number approximately 50% of the commercial fishermen's catch is made up of undesirable or low market value fish, i.e. burbot, suckers, ciscoes

- ages of the 1975 and 1976 whitefish samples indicate that the commercial fishery for whitefish relies heavily on 7 and 8 year old fish; 2 or 3 successively poor year classes could severely cripple the fishery

Domtar requested MNR assistance in obtaining fish samples from Nipigon Bay; these were taken to see if fish flesh is tainted by the effluent pumped into Nipigon Bay by kraft

mill at Red Rock

 rainbow smelt now plentiful and caught by several commercial fishermen in Lake Nipigon

a black bullhead, not previously found in Lake Nipigon, was

captured at the MNR base at MacDiarmid

 Nipigon District did not stock any hatchery fish this year because the Dorion Hatchery was closed

the largest brook trout in the Nipigon Fish Derby weighed 7 lb. 9 3/4 oz.

- the largest brook trout in the Beardmore Fish Derby weighed 5 lb. 8 1/2 oz.

- the pink salmon run appeared to be at or slightly above the level of the 1975 run

 salmon were reported to be in water systems located along Lake Superior, including the Nipigon River

- 48 adults noted in cormorant colony on Logan Island

- there were 26 nests present compared to only 14 in 1976; 64 live young compared to only 14 in 1976

- district trappers increased their returns by 25% due, in part, to the rise in production and price of lynx

Kelso et al., 1977

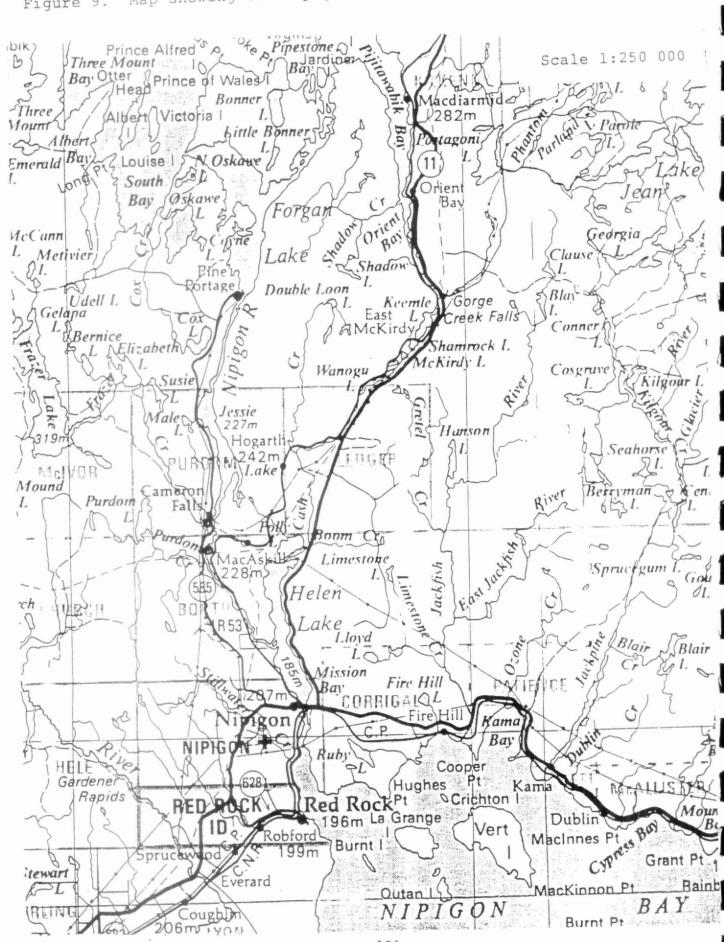
- Red Rock mill had the approximately annual production of 61,000 tonnes of newsprint; 203,000 tonnes of kraft linerboard

 a series of process changes for environmental improvement of the effluent has occurred during the mills immediate history

1978 Ritchie and Black, 1988

92000 brook trout eggs taken from West Bay to the hatchery

Figure 9. Map showing the Nipigon River.



location Nipigon River under highway bridge

- "No walleye spawning, water lowest ever recorded.
Cladophora thick on rocks and sedimentation on rocks on former walleye spawning grounds apparent. A group of 7 perch observed, a few suckers, and 1 smelt. One walleye seen at outlet to Nipigon's sewage lagoon. It was very large (and possibly very old)".

granular Bayer used on upper river

R. Walroth, 1979

 lake whitefish represented 565 of the total commercial fish catch in 1978 compared to 70.8% of the total catch in 1919

J. Stanley, 1978

"At the top of the hierarchy is the aristocrat of all stream-living animals, the brook trout, <u>Salvelinus</u> <u>fontinalis</u>. Its specific name <u>fontinalis</u>, means "living in springs", a fitting name for a species which requires cold water for proper growth"

brook trout depend on cold water and upwelling spring water
 "Bona - fide brook - trout streams were abundant in Ontario when Europeans first settled this province. As the land was cleared and the streams drained, the coldwater character of many of the small watercourses changed"

Nipigon District Annual Fish and Wildlife Report, 1978-79

 an estimated total of 134 moose on the Lake Nipigon Islands represents the highest population estimate since the islands were closed to hunting in 1970

 Dr. Cumming, associate professor at Lakehead University began caribou work with radio collars to determine their range; seven caribou on Lake Nipigon received collars

 the colony of Double-crested cormorants east of Logan Island in Lake Nipigon was visited July 22

- 47 adult birds were observed, 2 were positively banded; 30 nests were counted with 62 eggs; 33 naked young were seen

Chesley Imhoff, 1988

"Ontario Hydro began to raise and lower the river levels after they started to use the Ogoki Watershed Diversion" this "created a sand bar halfway across Lake Helen"

- "I walked approximately a mile and there were hundreds of pockets of water varying from a few inches in diameter to ten to fifteen feet in diameter and in these pockets there were hundreds of minnows, up to three inches in length, crayfish, fresh water clams, snails etc. In no time the area was filled with predators such as gulls, ravens and crows and by late afternoon, what the predators did not get the sun did."
- the author suggests that this repeated process may be in part due to the decline of the speckled trout

1979

Sea Lamprey Control Centre, 1988

granular Bayer used in upper river

Ted Gorsline, 1979

- Frank Goodman states that the late Art Sutherland captured a 21½ pound brook trout in a net in Lake Nipigon only a few years ago

"In the last five years because of changes in logging and commercial fishing practices, the average size of the largest brook trout caught by angling in Nipigon has increased. It runs close to ten pounds every year"

 recommended angling in the Parmachene Rapids or just south of the railway bridge in Nipigon or at Virgin Falls (depending on what hydro does with the water fluctuations)

Robert Walroth, 1979

- lake trout and lake sturgeon are in a badly depressed state unable to rehabilitate themselves due to present harvest levels
- lake whitefish and walleye have achieved a certain degree of stability and appear to be holding their own in face of present harvest rates
- present quotas as they exist in the Ontario Fisheries Regulations are unrealistic in view of the present state of Lake Nipigon fish stocks. The saving grace appears to be that a number fishermen are not fishing up to their potential and therefore are not meeting their quotas.

Nipigon District Annual Fish and Wildlife Report, 1978-79

- 5 collared caribou were picked up with the radio receiver

M. E. MacCallum, 1989

1980

 daily limit for brook trout changed from 15 fish or 10 pounds plus one fish, to simply 15 fish

Ritchie and Black, 1988

- the Dorion Hatchery production of brook trout is based on a 5 year rotational line crossing method; domestic stocks in the hatchery are crossed and annual spawn-taking from hatchery broodstock is used to meet brook trout stocking needs

Sea Lamprey Control Centre, 1988

sea lamprey control conducted electroshocking in upper river

MacCallum and Selgeby, 1987

- lake whitefish numbers in Nipigon Bay seem to have recovered

Vander Wal et al., 1989

- the annual lake whitefish commercial harvest increased during the early 1980's
- this may have been a result of the greater reproductive potential of the whitefish responding more quickly to the decline of the sea lamprey

Buzz Lein, 1980

"In the meantime, the acid rain, varying water levels at the wrong time of year, silty water pouring into Lake Nipigon from the Ogoki dam, and the presence of smelts in the lake, are not conditions that are going to make living easier for the marine life in the lake, nor will they make the speckled trout any bigger."

Nipigon District Annual Fish and Wildlife Report, 1981-82

- 12 permanent water chemistry stations were established on Lake Nipigon
- results were as follows: no oxygen depletion was recorded to 30.0 meters; pH ranged from 6.4 to 8.2; alkalinity values ranged from 30.8 to 68.4 mg/l; mean total dissolved solids was 98.3 mg/l; secchi disc was 4.3 meters; nitrogen, phosphorus and chlorophyll a concentrations were low; very low levels of heavy metals were detected; no PCB's or mirex were detected; endrin was the only pesticide detected
- long term fish monitoring program initiated on Lake Nipigon because of declining stocks of some major commercial species

- nine streams on the east side of Lake Nipigon were monitored for the presence of smelt
- 20 smelt were observed in three of the streams but no significant spawning runs were seen
- rainbow trout run began April 20 on the Jackpine River and Stillwater Creek
- the average weight of 88 rainbow trout caught was 1.25 kg (or 3.4 lb.) with an average length of 52.2 cm (20.6 inches)
- 500 brook trout aged 17 months stocked in Caro Lake
- 500 brook trout aged 17 months stocked in Forbes Lake
- 1000 brook trout aged 46 months stocked in Lofquist Lake
- 6 caribou were observed of which 3 were captured and equipped with radio collars on the islands of Wabakimi Lake

Nipigon District Annual Fish and Wildlife Report, 1982-83

- cormorant population on Nipigon Bay appears to be expanding this year as sightings in the lower Nipigon River were quite common
- a known speckled trout spawning area in South Bay, Lake Nipigon was trap netted from September 22 to October 27, 1981 and found to be still active
- 70 speckled trout were caught of which 19 were recaptures;
 no immature fish were caught
- "Commercial data suggests that lake whitefish harvest levels in the north end of the lake may be excessive."
- the 1981 commercial fish harvest from Lake Nipigon has increased since 1980 by 26% or 193,981 lbs. for a total harvest of 923,941 lbs.
- harvests of whitefish, walleye and sturgeon increased by 106,446 lbs. (25%), 44,864 lbs. (68%) and 65 lbs. (310%) respectively
- the harvest of lake trout decreased by 28,792 lbs. (43%)
- the value of the catch increased by \$38,350.00 (8%) to a total value of \$511,723.00
- fishermen on Lake Nipigon currently operate on a total quota rather than on individual species quotas
- the total commercial catch from the Lake Superior waters of Nipigon District amounted to 448,498 lbs.
- the most prominent species by total value were herring, 268,173 lbs. at \$91,179.00; whitefish, 100,448 lbs. at \$68,305.00; lake trout, 10,177 lbs. at \$9,872.00 and chub, 18,604 lbs. at \$9,116.00
- a whitefish quota of 139,000 lbs. was licenced to Fisheries Management Zone 4A

- the chub quotas for Zones 4A and 4B were altered to 120,000 lbs. each
- in Zone 3 (Nipigon Bay) a quota of 47,000 lbs. of whitefish was issued and a quota for 28,800 lbs. of perch

1981

Ontario Ministry of Natural Resources, 1984

 Lake Nipigon harvested 14% of the Ontario total catch of whitefish

Sea Lamprey Control Centre, 1988

- fourth treatment for sea lamprey on the Nipigon River using TFM and powder Bayer 73
- abundant larval sea lamprey observed and/or collected
- treatment was 68 cubic meters per second of granular Bayer on upper river

R. Borecky, 1981

- secchi disc transparency 1.0 m in Ombabika bay due to added siltation - reading 2.3 m in 1924
- total dissolved solids 98.3 mg/l
- transparency in open water areas is moderate 4.7-5.2 m
- whitefish and sturgeon would be most affected by siltation because they are bottom dwelling

Borecky and Riordan, 1981

 experimental gillnetting has indicated that brook trout make up only 0.1% of fish caught (commercial fishing using gill net)

R. Borecky, 1982

 brook trout contribute 14.5%, by numbers of fish caught, to the harvest by Lake Nipigon tourist outfitters (angling)

Ritchie and Black, 1988

- minimum discharge from the Pine Portage Dam was lowered to 113 m³/second from the previous rate of 170 m³/second
- Ontario Hydro flooding rights for Lake Nipigon range from 257.9 to 260.6 m above sea level, a maximum fluctuation of 2.7 m (10 ft.)

1981 McIntyre, 1981

- the recreational fishermen are the number one priority group of users addressed in this plan; the high socio-economic value of this industry consititutes its primary importance in the District's Fisheries Management Plan

1982

Ontario Ministry of Natural Resources files, Nipigon District

- 40 adult lake trout stocked in Nipigon River (below Lake Helen)
- 32,300 eyed-egg brook trout stocked at Pine Portage
- 1,138 brook trout aged 36 months stocked in Jessie Lake

Sea Lamprey Control Centre, 1988

- granular Bayer used on upper river for sea lamprey control

R. Borecky, 1982

- size of spawning population of brook trout in West Bay estimated to be 92 adult fish
- South Bay estimated to be 72 adult fish
- spawning commences about mid-October and extends into November
- other spawning habitats include: Rapid, Kenna, Littlelake, Bean, Hogan, Castle, Stewart, and Moodoo Creeks; and the Wabinosh and Whitesand River,
- 46 adult brook trout taken from West Bay, Lake Nipigon to Dorion hatchery for brood stock

Day et al, 1982

- "In Ombabika Bay, turbidity appears to have competitively favoured sauger over walleye. Extensive silt deposition may have covered rubble spawning grounds and caused benthic species changes favouring burrowing organisms which are less accessible as fish food."
- effects of turbidity on commercial fishing are not clear due to other factors such as heavy fishing pressure and bark accumulation

Nipigon District Annual Fish and Wildlife Report, 1981-82

 47 caribou of the Armstrong herd were located during a February flight angler captured a 63 cm walleye on the Nipigon River on August 25; this fish was aged at 15+ years

 walleye are relatively few in the Nipigon River, most caught tend to be older individuals

Nipigon District Annual Fish and Wildlife Report, 1982-83

- a known speckled trout spawning area in West Bay, Lake Nipigon, was trap netted from October 12 to October 28, 1982 and found to be still active
- a total number of 61 trout were caught of which 15 were recaptures

- the trout were tagged before being released

- the 1982 commercial fish harvest from Lake Nipigon amounted to 862,057 lbs.; a decrease of 61,884 lbs. since 1981
- compared to 1981 the catches of whitefish, walleye and sturgeon decreased by 102,252 lbs. (19%), 17,722 lbs. (16%) and 86 lbs.

- the lake trout catch increased 1,920 lbs. (5%)

- the total catch value decreased by \$63,869.00 (12%) since 1981
- the licences were revised to contain quotas for individual amounts of whitefish, walleye, lake trout and sturgeon rather than an aggregate amount of these species

- 653000 eyed brook trout eggs were distributed in the Nipigon River system to bolster the existing brook trout population

surplus brook trout (2378) were also stocked in Lake Superior

- 994 (47 months) and 262 (59 months) were put in Dublin Creek
- 1122 brook trout aged 47 months were put in at Gurney
- 240000 eyed-egg brook trout stocked at Alexander Falls
 90000 eyed-egg brook trout stocked at Highway 17 bridge
- there has been a significant increase in the overall unit population of moose on the Lake Nipigon islands since hunting was banned in 1970
- a cormorant colony on Nipigon Bay has been located on a small island south-west of Condon Island
- at this site 162 flighted birds, 90 nests, and 9 flightless young were observed

- a 7 lb. 2 oz. brook trout was caught by John Height

- ticks or hair loss noticed on some of the reported dead moose
- grouse and snowshoe hare populations continued their decline in 1982
- the largest speckled trout entered in the Beardmore Fish Derby weighed 2.83 kg
- the largest speckled trout entered in the Nipigon Fall Fishing Festival weighed 2.11 kg

- lower Nipigon River (outflow of Lake Helen to Nipigon Bay) also treated using TFM and Powder Bayer 73
- treated 5 km of river, discharge 67 (cubic meters per second)
- moderate number of sea lamprey observed and/or collected
- third treatment for sea lamprey on Cash Creek
- only TFM used, treatment discharge 1.5 cubic meters per second
- treated 22.6 km of stream
- sea lamprey larvae scarce
- initial treatment of Polly Creek using TFM
- treated 2.8 km of stream, discharge .21 (cubic meters per second)
- sea lamprey larvae abundant
- granular Bayer also used on upper river

Ontario Ministry of Natural Resources files, Nipigon District

- 34,500 brook trout aged 4 months stocked at Pine Portage
- 500 brook trout aged 16 months stocked at Jessie Lake
- 650,000 fertile walleye eggs stocked in Nipigon River (below Lake Helen)
- highest reported concentration of emerald shiners at the mouth of the Ombabika River during October

1984

- 302,460 brook trout eyed-eggs stocked at Alexander Falls
- 663 brook trout aged 6 months stocked at Alexander Falls
- 1,579 brook trout aged 35 months stocked in Jessie Lake
- 3,050 lake trout aged 9 months stocked in Nipigon River (below Lake Helen)

Ritchie and Black, 1988

- 72,800 brook trout eggs from 23 adult brook trout were taken
- brook trout stocked in Lake Nipigon
 - 2000 subadult West Bay
 - 580 adults Russell Island
 - 6 adults MacDiarmid
 - 170 adults Blackwater River
 - 52 adults Naoan Island
 - 292 adults Shakespeare Island
 - 493 adults Mungo Point
 - 1936 adults South Bay
- young of the year brook trout were observed at Breakwater Point in McIntyre Bay

Sea Lamprey Control Centre, 1988

1984

granular Bayer used on upper Nipigon River

John Kerr, 1984

"Lake Nipigon, the Nipigon River, and the transparent waters of Lake Superior, centered on Nipigon Bay, still offer fishing for big-water brook trout in an area serviced by good roads."

"Before the Nipigon was dammed and harnessed for hydro power, brook trout had access to Rabbit Rapids from either Lake Superior or Nipigon. Today such movements are limited,

Rabbit Rapids has been flooded by a hydro project."

"The first three weeks after ice-out and the first two weeks of September are the best times to fish Lake Nipigon."

"The spring fishery on Nipigon is best for catching actual numbers of brookies, but the fish average larger in September and are more colourful closer to spawning."

many of the largest brook trout entered in the annual Molson

Big-Fish Contest are taken in the Nipigon River

- "The stretch from Lake Helen to just downstream of the Trans- Canada Highway is the first productive stretch, although coaster brook trout are caught right up to Alexander Falls, including in the Parmachene and Snowball Rapids. Upstream areas for river brookies include the narrows leading into Forgan Lake; below Virgin Falls dam; and below Cameron Falls."
- "Lake Superior is unpredictable for big specks."

1985

M. E. MacCallum, 1989

panel on TFM and Bayer 73 (1985) found the most susceptible species of large fish to be suckers

northern pike, walleye, and salmon affected occasionally

Johnny darter and trout-perch affected

Bayer 73 has an impact on sensitive invertebrate species

Nipigon Bay has been identified as an Area of Concern by the International Joint Commission because of environmental degradation caused by effluent from the mill

> Nipigon Gazette January 15, 1986

Ray Dupuis Sr., of Nipigon, was named 1985 Ontario Angler of the Year; he is a conservationist and practices catch-andrelease

Ontario Ministry of Natural Resources files, Nipigon District

1986

3,010 lake trout aged 12 months stocked in Nipigon River (below Lake Helen)

33,600 Lake Trout aged 11 months stocked in Nipigon River (below Lake Helen)

1,623 Walleye fingerlings in Nipigon River (below Lake Helen)

granular bayer used on upper river

Nipigon District, files

- buyouts of commercial fish licences in the western portion of Nipigon Bay by the Ontario Ministry of Natural Resources removed commercial interests from these waters
- habitat reclamation and rehabilitation of walleye, lake trout, and brook trout is currently underway

1986

Sea Lamprey Control Centre, 1988

- fifth treatment of Nipigon River using TFM and powder bayer
- treated 12.9 km of stream, discharge 55 cubic meters per
- abundant larval sea lamprey

J. G. Hamilton, 1987

19 species of fish collected in the lower Nipigon river

- several species indicative of good water quality were found (e.g. whitefish, natural rainbow and brook trout) but no walleye were collected

> Ontario Ministry of Natural Resources files, Nipigon District

- 28,800 lake trout 11 months stocked at Nipigon River (below Lake Helen)
- 187 adult Walleye stocked at Nipigon River (below Lake Helen)

1987

Sea Lamprey Control Centre, 1988

- fourth treatment of Cash Creek using TFM only
- treated 22.8 km, discharge .8 cubic meters per second
- sea lamprey larvae seen and/or collected scarce
- 2nd treatment of Polly Creek using TFM only
- treated 2.61 km, discharge was .13 cubic meters per second
- moderate sea lamprey larvae
- granular Bayer used on upper river

Anonymous, 1987

- "Without a doubt, most of the largest brook trout in Ontario come from the Nipigon system."

"Brookies from these areas dominate the Molson Contest year

after year."

"'Coaster' brookies can be caught along the shore of Lake Superior from Rossport to Nipigon."

- "Brookies can also be caught on the Nipigon with an easy

launching from town or from the Pine Portage Road."

 fishing is also productive in Lake Nipigon in the spring and fall

Dalziel, 1988

 electrofishing in Nipigon Bay and River in late July collected 26 species, no walleye were captured

> Ontario Ministry of Natural Resources, files

- creel survey showing very low catch-per-effort results of 0.03 fish caught per hour for brook trout
- 9000 brook trout aged 4 months stocked at Alexander Falls

Nipigon Gazette February 2, 1990

- Lake Nipigon Fisheries Assessment Unit constructed an artificial spawning shoal by creating an upwelling in a gravel bed near the mouth of the Postagoni River
- 30,000 Lake Nipigon strain brook trout eggs have been planted over the upwellings on the spawning bed during the last 2 winters
- a large number of fry were captured and released in both years
- the artificial spawning bed appears to be successfully incubating and hatching
- this will assist natural reproduction of brook trout in areas where spawning habitat is limited

Ontario Ministry of Natural Resources, files

- in late December, 1987, 10,000 Lake Nipigon strain brook trout eyed eggs were planted 8-12 cm deep at upwelling points in the artificial spawning bed
- these were put in place by a scuba diver as were the fry traps used to capture emerging brook trout fry the following spring

Table 5. Species composition of seine net, trapnet and gillnet in the Nipigon River, 1986-87.

Species	Seine Net	Trapnet at Lagoon **	Gillnet in Lake Helen***
A1	1	-	-
Alewife	7	2	-
Rainbow trout		-	1
Lake trout Lake whitefish		18	20
Round whitefish	1	180	18
	-	1	
Lake herring	11	1	13
Rainbow smelt		2	1
Northern pike		61	40
Longnose sucker	9	284	39
White sucker	49	-	-
Shiners	43	1	-
Burbot	2		-
Stickleback	77	-	-
Trout-perch	23	933	43
Yellow perch	20	1	10
Walleye	-	•	
TOTAL	180	1304	185

* Source: OMNR, 1986 ** Source: Furlong, 1986 *** Source: OMNR, 1987

Table 6. Fish species in the lower Nipigon River, 1986-87.

Species	Latin Name	Source
Sea Lamprey	Petromyzon marinus	1, 4
Alewife	Alosa pseudoharengus	1, 2, 4
Pink Salmon	Oncorhynchus gorbuscha	5
CohoSalmon	O. kisutch	6
Chinook Salmon	O. tshawytscha	4, 6
Rainbow Trout	O. mykiss	1, 2, 3, 4, 5, 6
Brook Trout	Salvelinus fontinalis	1, 4, 5, 6
Lake Trout	S. namaycush	4, 6
Lake Whitefish	Coregonus clupeaformis	1, 3, 4, 6
Lake Herring	C. artedii	3
Round Whitefish	Prosopium cylindraceum	1, 2, 4
Rainbow Smelt	Osmerus mordax	1, 2, 3, 4
Northern Pike	Esox lucius	3
Longnose Sucker	Catostomus catostomus	1, 3, 4
White Sucker	C. commersoni	1, 2, 3, 4
Shorthead Redhorse	Moxostoma macrolepidotum	4
Lake Chub	Couesius plumbeus	1, 4
Carp	Cyprinus carpio	1
Emerald Shiner	Notropis atherinoides	1, 4
Spottail Shiner	N. hudsonius	1, 4
Burbot	Lota lota	1, 3, 4
Brook Stickleback	Culaea inconstans	1, 4
Ninespine Stickleback	Pungitius pungitiius	4
Trout-perch	Percopsis omiscomaycus	1, 2, 4
Yellow Perch	Perca flavescens	1, 2, 3, 4
Walleye	Stizostedion vitreum	3, 5, 6
Least Darter	Etheostoma microperca	4
Johnny Darter	E. nigrum	4
Logperch	Percina caprodes	4
Mottled Sculpin	Cottus bairdi	1, 4
Slimy Sculpin	C. cognatus	1, 4

Sources: 1 - Hamilton, 1986

2 - OMNR, 1986

3 - Furlong, 1986

4 - Dalziel, 1987

5 - Creel survey, 1987

6 - Creel survey, 1988

Taken from M.E. MacCallum, 1989

Table 7a. Creel survey summary of the lower Nipigon River, July 21 to November 1, 1988.

Species	Catch per Unit Effort	Effort (hr)	Total estimated Harvest (numbers of fish)	
Coho salmon	0.084	117	10	
Chinook salmon	0.094	1779	173	
Rainbow trout	0.146	3731	552	
Brook trout	0.051	2024	135	
Lake trout	0.355	224	133	
Lake whitefish	1.762	86	170	
Walleye	0.154	32	5	

Table 7b. Creel survey summary at Pine Portage, July 21 to September 15, 1988.

Species	Catch per Unit Effort	Effort (hr)	Total Estimated Harvest (numbers of fish)	
Brook trout	0.038	887	33	
Lake whitefish	0.123	94	25	

Table 7c. Creel survey summary on the lower Nipigon River, September 1 to November 1, 1987.

Species	Catch per Unit Effort	
Pink salmon	0.03	
Chinook salmon	0	
Rainbow trout	0.06	
Brook trout	0.03	
Walleye	0.01	

^{*} Source: Nipigon District files

Ritchie and Black, 1988

1987

- 1000 adult brook trout stocked in Forgan Lake

Jackie Boughner, 1989

- The Lake Nipigon Watchdog Society was formed on Feb. 8, 1987 by twelve concerned individuals
- the society was formed to protect Lake Nipigon from overfishing, excessive timber cutting along the lake shores and islands and to express concerns over mining and its possible effects on the lake

T. F. Waters, 1987

- Lake Nipigon's brook trout has been reproductively isolated from the Lake Superior strains for a long time and appears to vary genetically from its older ancestors
- the brook trout once carried a separate scientific designation - variety <u>Nipigonensis</u> - as well as a different common name, silver trout
- Lake Nipigon is one of the few bodies of water in which the brook trout occurred naturally above waterfall barriers in prehistoric times
- at some time during the retreat of glaciation, perhaps because the Nipigon Basin received glacial melt waters differently than did the Superior Basin, brook trout apparently became established in Lake Nipigon separately from Lake Superior
- "Nipigon brook trout, now perhaps genetically distinct, have a high growth rate, and a trout 3 or 4 years old are trophies indeed", but this information is not as yet scientifically proven
- the double crested commorant is now making a slow comeback after it was nearly extirpated owing to pesticide contamination in their fish food base and subsequent lack of successful reproduction due to eggshell thinning
- Caribou survive on the islands in Lake Nipigon that have not been logged or burnt and have mature conifer forests containing lichen, their main food source
- the caribou decline was due to habitat degradation as loggers, settlers, hunters, and new large mammal species converged around the North shore
- woodland caribou are found to be more susceptible to the meningeal worm that causes "moose disease"
- this factor probably contributed to the decline of the caribou

MacCallum and Selgeby , 1987

1987

- the chemical control of sea lamprey that began in 1958 still remains the most effective means of reducing sea lamprey numbers
- recently, barrier dams have been constructed on several streams and field trials of the technique of releasing sterile males will probably soon begin
- the development of alternative control methods that will reduce dependance on chemicals, as well as further reduce the sea lamprey population would be beneficial

Ritchie and Black, 1988

- "There has been a drastic decline (of brook trout in Lake Nipigon) from an estimated 92 adults in 1982 to 18 adults in 1987 using the West Bay spawning area, while the number of adults using the South Bay spawning area has remained low but stable at 50 to 73 adults since 1981."
- "However, hatchery records indicate that both the South Bay and West Bay stocks have declined since the 1920's and 1930's. From 1923 to 1933 an average of 1,280,000 eggs, equal to the egg production of approximately 457 females was collected annually from West Bay and South Bay spawning areas."
- a tagging operation at Breakwater Point in McIntyre Bay resulted in 12 adults tagged and released

1988

Ontario Ministry of Natural Resources, files

 creel survey showing very low catch-per-effort of 0.05 brook trout caught per hour

Ritchie and Black, 1988

- young of the year brook trout were seen on May 6, prior to ice-out in South Bay, 0.3 m offshore at a depth of 0.3 m or less, over rubble, when the water temperature was 6.0°C
- the growth rate of Lake Nipigon brook trout is comparable to the highest rates reported in the literature
- the expected increase in growth rate with a decline in abundance was not noted in Lake Nipigon in the past seven years
- brook trout stomach contents sampled indicate that ninespine sticklebacks, rainbow smelt and sculpins are the most important food items used by brook trout
- the frequency of occurrence of smelt in the stomach contents is directly related to the abundance of smelt

- the age compositions in Lake Nipigon are similar from year to year with ages 3 and 4 contributing from 73 to 92% of the brook trout harvested by angling, 1981 to 1987
- "The effects of water level fluctuations have not been determined directly, but it is possible that changes in water levels may impact brook trout recruitment in two ways
 - drawdowns, especially during drought periods between September and the following ice-out period may expose redds causing increased egg mortality, and may also reduce the availability of nursery habitat and access to rivers/streams for cover
 - 2. high water levels may also impair recruitment in two ways. Firstly, high water levels cause increased shoreline erosion resulting in siltation of spawning areas. Secondly, since the hydro development on the Nipigon River, annual drawdown during the brook trout egg incubation period occurs in Lake Nipigon. This may result in redd areas becoming exposed or scoured by ice.
- Ritchie and Black (1988) also suggest that the large scale spawn-taking operations have played an important role in the decline of the brook trout
- "since the initial decline, angling pressure and other fishing and natural mortality factors such as commercial incidental harvest, predation and water level fluctuations in conjunction with a lower number of spawners depressed numbers further and recruitment may be insufficient to offset annual mortality"

C. Radder, 1988

- in his thesis on sportfishing in the Nipigon District, Radder found that the favorite species of fish sought by the 2000 anglers surveyed were: Pickerel (62.1% of the respondents) Pike (20.7%) and brook trout (17.2%)
- "The main fishing objective of 69.25 of the respondents was "fun", 23.1% of the respondents caught fish mainly for eating while only 7.7% of the respondents main fishing objective was trophies."
- 89.2% of the respondents practiced catch and release fishing, but only 5.4% did not keep any of the fish they caught
- the overall satisfaction of these visitors was very good with 100% of the respondents saying that they would return to the Nipigon District

Dan Baughman, 1988

1988

- "Chinook salmon, stocked on the U.S. side of Lake Superior, are spawning in increasing numbers in the Nipigon River, adding to a list of problems for the famous waterway's native speckled trout."
- chinook salmon compete for food and habitat with the brook trout

Ritchie and Black, 1988

"Exploitation, smelt introduction and water level fluctuations have all been implicated in the Lake Nipigon brook trout's decline since the 1930's."

1989

M. E. MacCallum, 1989

- the 1988 run of lake trout, consisting of stocked fish from $1\frac{1}{2}$ to 2 pounds, was the largest since the 1950's
- pre-spawners of Chinook Salmon were seen from August until late October

B. Ritchie, 1989

- the 1989 run of smelt was the largest on record, approximately 30 to 40% larger than the run of 1984 according to monitoring on the spawning site on the Postagoni River
- the studies of the Lake Nipigon Assessment Unit find that whitefish could sustain an increased harvest level but the impacts of smelt on this fishery won't be known until 1994; lake trout cannot sustain an increased harvest

Ontario Ministry of Natural Resources, files

 48 adult walleye stocked in Nipigon River below Lake Helen
 the season for walleye is closed year-round as of January 1, 1989

Sea Lamprey Control Centre, 1988

 granular Bayer used on upper Nipigon River to control sea lamprey
 Ontario Sport Fishing

ntario Sport Fishing Regulations, 1989

daily limit of brook trout reduced from 4 fish to 2 fish
 also as of January 1, 1989 there is no open season for walleye fishing in Nipigon Bay, the Jackfish River, the Nipigon River system up to Alexander Dam

Guide to Eating Ontario Sport Fish, 1989

1989

- sauger over 30 cm from Ombabika Bay are subject to consumption restriction according to the "Guide to Eating Ontario Sport Fish"
- long term consumption restricted 0.2 kg/week
- children under 15 and women of childbearing age should not eat sauger out of Ombabika Bay
- this restriction is based on mercury levels between 0.5 and 1.0 parts per million

G. Ellis, 1989a

 Ellis notes the declining trophy speckled trout fishery on Lake Nipigon, the Nipigon River, and the northern shore of Lake Superior

- "Hydro dams on the river, angler pressure on Lake Nipigon and industrial pollution in Superior being the guilty parties; but these waters continue to be the worlds most accessible trophy brook trout fishing."

Dan Baughman, 1988

- "The single largest reason brook trout are disappearing from the Nipigon River - the world's premier brook trout stream is fluctuations in water levels due to Ontario Hydro's three generating stations, fishermen in Nipigon claim."
- Dan Klatt reports "the water drops three or four feet within minutes."
- "Last November, just as brook trout and chinook salmon had finished spawning for the year, the river level downstream of Alexander Falls generating station - the first dam above Lake Superior - dropped eight feet."
- this kind of a drop in water levels would leave spawning beds exposed and may result in egg mortality

Nipigon Gazette December 7, 1989

- the Nipigon District Fisheries Management Plan highlights the strategy for rehabilitation of trophy brook trout populations
- "The strategy for brook tout includes a possession limit reduction, a minimum size limit (46 cm) closure of spawning areas to angling, minimizing impact of water level fluctuations, minimizing potential for accidental catches in commercial nets, creation and enhancement of spawning habitat, and stocking."
- "The minimum size limit will enable the brook trout to spawn during at least two seasons before they are taken from the river and will emphasize the trophy status of these fish."

- the rationale for the reduction in the limit of brook trout from 4 to 2:
 - data indicate brook trout numbers declining
 - data indicate high angler exploitation rate
 - want to rehabilitate this valuable fishery
 - want to reduce harvest yet maintain a viable fishery emphasize the "trophy" status of Nipigon strain brook trout
- the release of brook trout less than 46 cm in length will reduce angler harvest by 60%

G. Ellis, 1989b

- "After 35 years of serious brook trout angling, catch and release methods are practiced more and more."
- Ray Dupuis Sr. says "it is getting harder for me to justify killing a 6 pound speckled just to place it in a derby."
- the local fisherman are realizing the need to preserve the brook trout and many are practicing catch and release methods

Ontario Ministry of Natural Resources, files 1989

 in early January, 1989, 20,000 Lake Nipigon strain eyed eggs will be planted and the success of hatching will be quantitatively assessed by monitoring emerging fry from 505 of the upwelling area

Brook (speckled) Trout Limits and Closing Dates

Lake Nipigon except West Bay - 2 fish - September 16
West Bay (Lake Nipigon) - no open brook trout season
Nipigon River System - 2 fish - September 16
Lake Superior - 3 fish - September 16
Inland Waters - 7 fish - September 16

Times-News January 23, 1989

interesting to note that in the speckled trout results, 13 of the 15 top winners in the 30th annual Big Fish Contest were caught in the Lake Nipigon - Nipigon river system, in the live release competition

- "The fishermen entered Lake Nipigon via the "overflow" north of Pine Portage. It is here the Nipigon River exits the main Lake."
- his group was fishing for brookies in South Bay near the exposed reefs and small islands but the trout hadn't reached the spawning grounds yet
- they decided to move north to work the spawning grounds off Shakespeare Island
- "It took an hour for the four of us to catch and release 7 more (speckled) trout, the biggest slightly over 4 pounds."
- the fisherman were able to see schools of brook trout cruising along
- "South, West and English Bay, along with Shakespeare Island chain of islands are always good to go for a brook trout."
- "A live cockatouche minnow, sometimes called sculpin or muddler, will entice a strike just about 100% of the time if its placed properly."
- the largest brook trout of the trip was taken in West Bay and was near 5 pounds and it was released
- "Lake Nipigon's speckled trout population seems to be on its way back."

1990

Ontario Sport Fishing Regulations 1990

- Ontario resident sport fishing licence seasonal tag (valid for calendar year) \$11.50 4 day tag \$6.50
- non resident (a person who is not a resident of Canada)
 4 day tag \$16.25
 21 day tag \$28.75
 Seasonal tag \$34.50
 2 spousal tags (valid for calendar year) 46.00
- the Fisheries Act of Canada is designated to protect "fish habitat" which the Act defines as "spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly, in order to carry out their life process"
- the open season for brook trout is from January 1st to September 15th
- the walleye season in Nipigon Bay on Lake Superior is closed all year
- Porcupine, Geikie, Parting, Telluride, Davis, Eastford, Elkhorn, Round, Ford, Hubert, Margaret and Wildgoose Lakes are closed all year to walleye angling
- Polly Lake, Jackfish River between Nipigon Bay and the first barrier is closed all year to walleye and sauger angling

 Nipigon river between Alexander Falls Dam and Nipigon Bay and Helen Lake is closed all year to walleye and sauger

1990

Ontario Ministry of Natural Resources, files

Catch and Possession Limits and Size Limits for Brook Trout

- Lake Nipigon, Forgan lake, Polly Lake: two in one day; minimum length of 46 cm (18 inches)
 - Nipigon River, Jessie Lake, Helen Lake: two in one day; minimum length of 46 cm (18 inches)
 - in most other areas in Ontario the limit is five brook trout per day with no size limits

Ontario Ministry of Natural Resources, files

- Nipigon museum fire occurred on February 11, 1990

- 25% of the historical items were lost including the world record brook trout skin from 1914

Ontario Ministry of Natural Resources, files

- Nipigon River landslide 2 km upstream from Lake Helen occurred on April 23 (size 400m X 400m X 7m)
- severe turbidity was observed downstream into Lake Superior
- turbidity was such that spring spawners were not expected to pass through it
 - recently hatched fall spawners still in the area were probably killed
- spawning beds downstream of the slump were plugged with silt

MNR and Ontario Hydro Announce Flow Agreement to Protect Nipigon River Brook Trout

 Ontario Hydro agreed to alter Hydro dam operating procedures in the Nipigon River to protect the brook trout spawning sites from exposure by supplying enough flow to cover the sites during development of the young fish

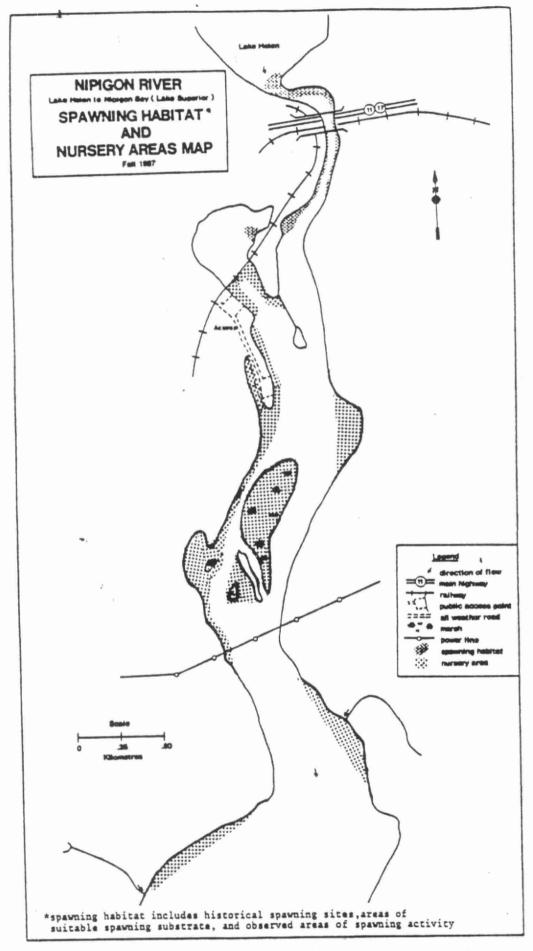


Figure 10. Map of aquatic habitat inventory below Lake Helen. from OMNR files. Nipigon District.

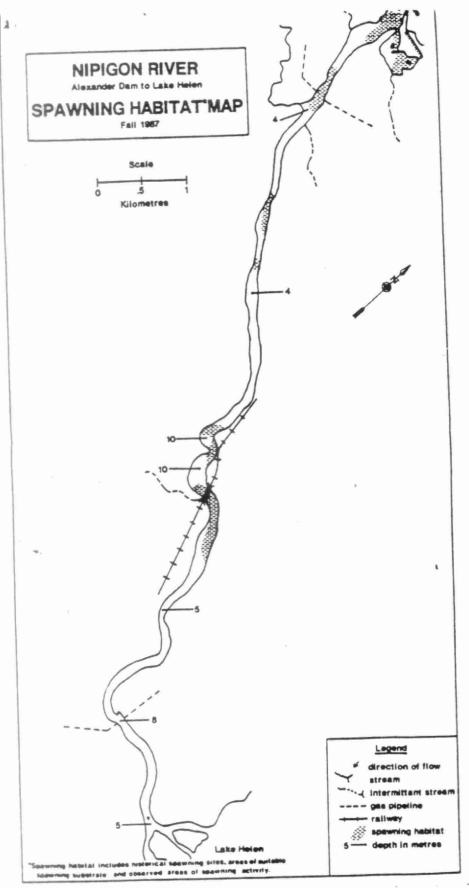


Figure 11. Map of spawning habitat inventory between Alexander Falls and Lake Helen. from OMNR files. Nipigon District.

DISCUSSION

This report is not conclusive but tries to give a general overview of the changes in the Lake Nipigon area. Many factors can be considered as being partially responsible for the decline of certain fish species.

Physical changes to the river as a result of industry is often the cause of disrupted fish habitat. The accumulation of woody debris on the bottom of lakes and rivers as a result of extensive log driving is detrimental to bottom dwelling fish and may be partially responsible for the decline of the lake sturgeon. This build up of material is often blamed for the suffocation of eggs during incubation.

Hydro-electric development on the Nipigon River has greatly altered its physical character. The building of dams has changed the flow of the river by forming reservoirs and virtually eliminating all white water sections. The water level fluctuations imposed by Hydro often result in low water levels at a time most crucial to the incubation of brook trout eggs. The dams provide barriers to migration as well as providing barriers to invading species such as the sea lamprey and the Pacific Salmon. The formation of reservoirs flooded large areas and as a consequence the decaying organic matter released large amounts of methyl mercury. The methyl mercury was taken up and resulted in higher than average levels of mercury in some fish species, particularly walleye and sauger. The additional flow of water resulting from the Ogoki diversion increased the turbidity of Ombabika Bay as well as increasing the natural effects of erosion and deposition.

The construction of the railway may also have affected the Nipigon River system. The primary means of transportation for men and supplies was via the Nipigon River and Lake Nipigon while the Canadian Northern Ontario railway was being built. The construction of bridges, roads, and portages could have an impact on the habitat of some species.

Many factors which may have affected the fisheries are restricted to Nipigon Bay and the lower Nipigon River. The water quality of Nipigon Bay has been severely affected by sewage and effluent in the past. Pollution has been partially blamed for the drastic decline of

walleye in the 1960's. The lower Nipigon River and other Nipigon Bay tributaries are treated periodically with Bayer 73 and TFM. Another chemical introduced into the waterway was DDT. It was used at the Cameron Falls colony and other settlements as a means of controlling black fly populations. The harmful effects of DDT are now well documented and it is no longer used.

Angling has been identified as a stress even in the earliest diaries. "Gentlemen Anglers" were found on the Nipigon river as early as 1865 in search of the world renowned speckled trout. By 1888, some anglers were complaining that the tourists were becoming far too numerous. In the early 1900's, the Fisheries Branch of Ontario was removing coarse fish which they believed were "crowding out" the trout. At the same time, licenses for sport fishing were issued for Lake Nipigon, the Nipigon river and adjacent waters. The daily limit for brook trout in the Nipigon area was reduced from 30 fish in 1912 to just 2 fish in 1989. In an attempt to offset fishing pressure, the Nipigon River was periodically stocked with brook trout from 1921 to 1987.

The Nipigon District Fisheries Management Plan released in 1989 says "brook trout will be the priority species on the Nipigon River and the other Lake Superior tributaries, with secondary attention to chinook and rainbow trout. The focus will be on enhancement of spawning habitat and protection of spawning populations. Walleye will be a priority in Nipigon Bay through the ongoing rehabilitation program to restore a selfsustaining population". Brook trout spawning redds are being located and monitored in an attempt to preserve the natural habitat. An artificial spawning shoal has also been built in Lake Nipigon to facilitate natural reproduction. This project has been conducted for 2 years and appears to be successful. The catch and release method of angling is being promoted and has been adopted by many of the local anglers who wish to preserve their fishery. It is hoped that with increased public awareness and proper management actions the rehabilitation of the brook trout will be successful.

REFERENCES

- Adamstone, F.B. 1924. The bottom fauna of Lake Nipigon. Univ. Toronto Stud. Biol. Ser., Publ. Ont. Fish. Res. Lab. 19.
- Addison, Peter. 1945. Applications of DDT in control of spruce budworm, 1945. <u>In</u>. Forest Spraying and Some Effects of DDT. Dept. of Lands and Forests, Bio. Bull. No. 2. 1949. pp. 79-91.
- Agassiz, Louis. 1850. Lake Superior: Its physical character, vegetation, and animals, compared with those of other regions. Boston: Gould, Kendall, and Lincoln.
- Alexander, Kirkland B. 1911. Log of the Northshore Club. Unpub. Rep.
- Ontario Game and Fish Commission. Commissioner's Anon. 1892. Report. First Annual Report of the Fisheries Branch of the 1900. Province of Ontario for 1899. Second Annual Report of the Fisheries Branch of 1901. the Province of Ontario for 1900. Third Annual Report of the Fisheries Branch of the 1902. Province of Ontario for 1901. Fourth Annual Report of the Fisheries Branch of 1903. the Province of Ontario for 1902. Fifth Annual Report of the Fisheries Branch of the 1904a. Province of Ontario for 1903. 1904b. Report of the Deputy commissioner of Fisheries for the year 1903. Sixth Annual Report of the Fisheries Branch of the 1905. Province of Ontario for 1904.
- _____ 1906. Seventh Annual Report of the Fisheries Branch of the Province of Ontario for 1905.
- ____ 1907. Eighth Annual Report of the Fisheries Branch of the Province of Ontario for 1906.
- _____ 1908. First Annual Report of the Game and Fisheries of the Province of Ontario 1907.

1909.	Second Annual Report of the Game and Fisheries of the Province of Ontario 1908.
1910.	Third Annual Report of the Game and Fisheries of the Province of Ontario 1909.
1912a.	Final Report of the Game and Fisheries Commission 1909-1911.
1912b.	Fifth Annual Report of the Game and Fisheries of the Province of Ontario 1911.
1913.	Sixth Annual Report of the Game and Fisheries of the Province of Ontario 1912.
1914.	Seventh Annual Report of the Game and Fisheries of the Province of Ontario 1913.
1915.	Eighth Annual Report of the Game and Fisheries of the Province of Ontario 1914.
1916.	Ninth Annual Report of the Game and Fisheries of the Province of Ontario 1915.
1917.	Tenth Annual Report of the Game and Fisheries of the Province of Ontario 1916.
1918.	Eleventh Annual Report of the Game and Fisheries of the Province of Ontario 1917.
1919.	Twelfth Annual Report of the Game and Fisheries of the Province of Ontario 1918.
1920.	Annual Report of the Department of Game and Fisheries 1919.
1921.	Annual Report of the Department of Game and Fisheries 1920.
1922.	Annual Report of the Department of Game and Fisheries 1921.
1923.	Annual Report of the Department of Game and Fisheries 1922.
1924.	Annual Report of the Department of Game and Fisheries 1923.
1925.	Annual Report of the Department of Game and Fisheries 1924.

1926.	Annual Report of Fisheries 1925.	the	Department	of	Game	and
1927.	Annual Report of Fisheries 1926.	the	Department	of	Game	and
1928.	Annual Report of Fisheries 1927.	the	Department	of	Game	and
1929.	Annual Report of Fisheries 1928.	the	Department	of	Game	and
1930.	Annual Report of Fisheries 1929.	the	Department	of	Game	and
1931.	Annual Report of Fisheries 1930.	the	Department	of	Game	and
1932.	Annual Report of Fisheries 1931.	the	Department	of	Game	and
1933.	Annual Report of Fisheries 1932.	the	Department	of	Game	and
1934.	Annual Report of Fisheries 1933.	the	Department	of	Game	and
1935.	Annual Report of Fisheries 1934.	the	Department	of	Game	and
1936.	Annual Report of Fisheries 1935.	the	Department	of	Game	and
1937.	Annual Report of Fisheries 1935-3		Department	of	Game	and
1938.	Annual Report of Fisheries 1936-3		Department	of	Game	and
1939.	Annual Report of Fisheries 1937-3		Department	of	Game	and
1940.	Annual Report of Fisheries 1938-3		Department	of	Game	and
1941.	Annual Report of Fisheries 1939-4		Department	of	Game	and
1942.	Annual Report of Fisheries 1940-4		Department	of	Game	and

- _____ 1943. Annual Report of the Department of Game and Fisheries 1941-42.
- _____ 1944. Annual Report of the Department of Game and Fisheries 1942-43.
- _____ 1945. Annual Report of the Department of Game and Fisheries 1943-44.
- _____ 1946. Annual Report of the Department of Game and Fisheries 1945-46.
- Anon. 1987. 101 Hotspots for '87. <u>In</u>. Ontario Out of Doors. Jan/Feb. 1987.
- Arthur, Elizabeth. 1973. (ed.) Thunder Bay District, 1821 1892, A Collection of Documents. Univ. of Toronto Press. pp. 307.
- Bailey, R.M. and G.R. Smith. 1981. Origin and geography of the fish firma of Laurentian Great Lakes basin. Can. J. Fish. Aquat. Sci. 38: 1539 1561.
- Baughman, Dan 1988. Salmon Seen as Latest Threat to Nipigon River's Renowned Specks. <u>In</u>. Thunder Bay Times News, January 3, 1988.
- Bell, Robert. 1870. Report on the geology of the northwest side of Lake Superior, and of the Nipigon District. From the reports of the Geological Survey of Canada. 1867 1869.
 - Bertrand, J.P. 1962. A History of Lake Nipigon District. <u>In</u>. Norshore Sentinel, Thursday July 19, 1962.
 - Bertrand, J.P. 1959. Highway of Destiny. Vantage Press: Toronto.
 - Bigelow, N.K. 1923. The food of young suckers (<u>Catostomus</u> <u>commersoni</u>) in Lake Nipigon. Univ. Toronto Stud. Biol. Ser. 24, Publ. Ont. Fish Res. Lab. 21:83 115.
 - Boon, Thomas. 1963. The Anglican Church from the Bay to the Rockies. Toronto.
 - Borecky, R.A. 1981. Spring creel census in South Bay, Lake Nipigon, 1980. LNFAU Report. 38 pp.
 - Borecky, R.A. and T. Riordan. 1982. Sport fishing harvest on Lake Nipigon, 1980 - 81. LNFAU Report, 1982 - 4.
 - Borecky, R.A. and T. Riordan. 1984. Investigation of speckled trout on spawning site, West Bay, 1983. LNFAU Report 1984 1.

- Boughner, Jackie. 1989. Watchdog Society Still Active. <u>In</u>. Thunder Bay Times News. May 25, 1989.
- Campbell, Henry C. 1971. Early Days on the Great Lakes, The Art of William Armstrong. McClelland and Stewart Ltd., Toronto: pp. 128.
- Clemens, W.A. 1923. The limnology of Lake Nipigon. Univ. Toronto Study Biol. Ser., Publ. Ont. Fish. Res. Lab. 11.
- Clemens, W.A., J.R. Dymond, N.K. Bigelow, F.B. Adamstone, and W.J.K. Harkness 1923. The Food of Lake Nipigon fishes. Univ. Toronto. Stud. Biol. Ser.22, Publ. Ont. Fish Res. Lab. 16: 171 188.
- Cumming, H.G. 1958. Report on Forty Years Commercial Fishing Records for Lake Nipigon. Ministry of Natural Resources, Nipigon District, Unpubl. Rep. 6 pp.
- Dalziel, R.I.R. 1988. Survey of critical fish habitat within International Joint Commission designated Areas of Concern, June - October, 1987 for OMNR. 84 pp.
- Dawson, K.C.A. 1969. A Report on Lake Nipigon Fur Trading Posts. Toronto: Ontario Archaeological and Historic Sites Board.
- Day, J.C., K.C. Bridger, S.E.Peet, and B.F. Friesen. 1982.

 Northwestern Ontario River Dimensions. Water Res. Bull. 18
 (2): 297-305.
- Dymond, J.R. 1926 The Fishes of Lake Nipigon. University of Toronto Studies: Biology Series, Pub. Ont. Fisheries Research Lab., No. 27.
- Ellis, Gord. 1989a. Superior's Coaster Brookies. <u>In</u>. Ontario Fishing Digest, 1989.
- Ellis, Gord. 1989b. Nipigon's Ray Dupuis shares some secrets.

 Northwestern Ontario Fishing and Hunting. September 1989.

 Vol. 1 No. 4.
- Fisheries Research Board of Canada 1957. Annual Report for 1956. Great Lakes Fish. Comm.

	1958.	Annual	Report	for	1957.	Great	Lakes	Fish.
Comm.								
	1959.	Annual	Report	for	1958.	Great	Lakes	Fish.
Comm.								

- ________1961. Annual Report for 1960. Great Lakes Fish.

 Comm.

 ________1963. Annual Report for 1962. Great Lakes Fish.

 Comm.

 ________1964. Lamprey control experiment p. 24 29 in Canada. Annual Report for 1963. Great Lakes Fish. Comm.

 _________1966. Annual Report for 1965. Great Lakes Fish.

 Comm.

 _________1982. Annual Report 1981 Sea Lamprey Control

 Centre. 116 p.
- Gapen, Dan Sr. 1989. Lake Nipigon Brookie Comeback. <u>In</u>. Ontario Fishing Digest 1989. pp. 88 92.
- German, M.J. 1968. Biological Survey of Nipigon Bay 1966 1967. Ontario Water Resources Commission.
- Gibson, B.H. 1963. Results of a three year study of Lake Nipigon. Lake Trout harvested by commercial fisherman between 1960-1962. Ont. Dept. Lands and Forest. Unpubl. Rep.
- Gollat, R. 1975. An Investigation into the Fish and Wildlife values of the Lake Nipigon Islands. Ontario Ministry of Natural Resources. Unpubl. Rep. Nipigon District.
- Goodier, John L. 1982. The Fish and Fisheries of Canadian Lake Superior. Unpubl. Rep.
- Gorsline, Ted. 1979. Lake Nipigon. <u>In</u>. Ontario Out of Doors. July 1979 pp. 15 26.
- Griffith, Ray. 1972. A History of Lake Nipigon. No Publisher. Thunder Bay Museum.
- Hamilton, J.G. 1987. Survey of critical fish habitat within International Joint Commission designated Areas of Concern, August November, 1986. for OMNR. 117 pp. and appendices.
- Hamilton, S. and J. Brigham. 1986. Rediscover Red Rock House.
 Pamphlet, Min. of Citizenship and Culture, Min. of Northern
 Dev. and Mines. 12 pp.
- Hartviksen, C. and W. Momot. 1989. Fishes of the Thunder Bay Area of Ontario. Wildwood Publications.
- Hewitt, E.R. 1948. A trout and salmon fisherman for seventyfive years. Charles Scribner's Sons, New York: 33 pp.

- Hogg, T.H. 1931. The Alexander Power Development on the Nipigon River. The Bulletin. May: 161-172. Hydro-Electric Power Commission of Ontario.
- Holmes, G.L. 1975. Ogoki Fisheries Study. Unpubl. Rep. Nipigon District.
- Holmes, G.L. 1976. Ogoki Fisheries Study. Unpubl. Rep. Nipigon District.
- Hydro Electric Development on Nipigon River, <u>The Canadian Engineer</u>, Vol. 36, June 12, 1919, 3 pp.
- Hydro-Electric Power Commission of Ontario. 1925. The 17th annual report of the HEPC .
- Hydro-Electric Power Commission of Ontario. 1926. The 18th annual report of the HEPC. pp. 75-77.
- Hydro-Electric Power Commission of Ontario. 1927. The 19th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1932. The 24th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1940. The 33rd annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1945. The 37th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1946. The 38th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1950. The 42th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1966. The 58th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1954. The 46th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1957. The 49th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1964. The 56th annual report of the HEPC.
- Hydro-Electric Power Commission of Ontario. 1970. The 62nd annual report of the HEPC.

- Cameron Falls In Hydro News.
- the HEPC p. 94.
- Nipigon Plant, in Hydro News p.4.
- _____. 1967. The report of the HEPC for the year 1966.
- James, T.C. 1921. "Nipigon Development", The Bulletin: H.E.P.C.
 of Ontario January February 1921. 12pp.
- Kelso, J.R.M., C.K. Minns, and R.J.P. Brouzes. 1977. Pulp and paper mill effluent in a freshwater environment. J. Fish. Res. Board Can. 34: 771-775.
- Kerr, John. 1984. Big Water Brook Trout. <u>In</u>. Ontario Out of Doors. March, 1984.
- King, Adolph. 1971. History of commercial fishing on Lake Nipigon. Nipigon District files.
- Lambert, R.S. and P. Pross. 1962. Renewing Nature's Wealth. Toronto: Dept. Lands and Forests.
- Lawrie, A. H. 1978. The fish community of Lake Superior. J. Great Lakes Res. 4(3-4): 513-549.
- Lawrie, A.H., and J.F. Rahrer. 1972. Lake Superior: effects of exploitation and introductions on the Salmonid community. J. Fish. Res. Board Canada 29: 765-776.
- Lein, L.M. May 3, 1972. Museum Musings. <u>In</u>. The Nipigon Gazette, quoted in letter to Pat Furlong from Betty Brill, Nipigon Museum 1987.
- Lein, L.M. May 17, 1972. Museum Musings.
- Lein, L.M. July 5, 1972. Museum Musings.
- Lein, L.M. Nov. 15, 1972. Museum Musings.
- Lein, L.M. Feb. 14, 1973. Museum Musings.
- Lein, L.M. Sept. 19, 1973. Museum Musings.

- Lein, L.M. Dec. 12, 1973. Museum Musings.
- Lein, L.M. April 9, 1974. Museum Musings.
- Lein, L.M. Aug. 3, 1977. Museum Musings.
- Lein, L.M. Oct. 12, 1977. Museum Musings.
- Lein, L.M. May 28, 1980. Museum Musings.
- Leslie, J.K. and J.R.M. Kelso. 1977. Influence of a Pulp and Paper Mill Effluent on Aspects of Distribution, Survival and Feeding of Nipigon Bay, Lake Superior larval fish. Bull. Env. Contamination and Toxicology. Vol. 18, No. 5: 602-610.
- MacBeath, M. 1924. Nipigon the sea without a shore. from Nipigon Bungalow Camp. A Canadian Pacific Publication. 16 pp.
- MacCallum, M.E. 1989. The Nipigon River; A Retrospective Summary of Information about the Fish community. OMNR files, Nipigon District. 38 pp.
- MacCallum, W.R., and J.H. Selgeby, 1987. Lake Superior revisited 1984. Can. J. Fish Aquat. Sci. 44 (Suppl. 2): 23-36.
- MacDiarmid, F., B.A. Bensley, and C.A. Candee. 1930. Report of Special Committee on the Game and Fish Situation. Sessional paper. No. 54.
- MacKay, H.H. 1951. The Net Plankton of Lake Nipigon. Ph.D. thesis. Univ. of Toronto.
- McInnes, W. 1894. Summary Report on the Survey of Lake Nipigon. Geo. Survey, Canada New Series, vol. VII, part A: 48-51.
- Mihailovic, D. 1973. The Last Water Drive on Lake Nipigon. Nipigon District files, pp. 5.
- Millard, E.E. 1917. Days on the Nepigon. No publisher. 104 pp.
- Mills, E.W. no date, Paddle, pack, and speckled trout. Tales of fishing in northern Ontario in the 1930's and 1940's. No publisher. 117 pp.
- Near. F.M. 1982. Nipigon River. History of development power and storage. Report No. 82579 File No. 143-50. Ontario Hydro.
- Ontario Ministry of Natural Resources. 1974. Annual Report 1973-74, Fish and Wildlife, Nipigon District. Unpubl. Rep.

- Ontario Ministry of Natural Resources. 1975. Annual Report 1974-75, Fish and Wildlife, Nipigon District. Unpubl. Rep.
- Ontario Ministry of Natural Resources. 1976. Annual Report 1975-76, Fish and Wildlife, Nipigon District. Unpubl. Rep.
- Ontario Ministry of Natural Resources. 1977. Annual Report 1976-77, Fish and Wildlife, Nipigon District. Unpubl. Rep.
- Ontario Ministry of Natural Resources. Annual Report 1981-82, Fish and Wildlife, Nipigon District. Unpubl. Rep.
- Ontario Ministry of Natural Resources. Annual Report 1982-83, Fish and Wildlife, Nipigon District. Unpubl. Rep.
- Ontario Ministry of Natural Resources. Ontario Sport Fishing Regulations Summary 1990. Pub. 1989.
- Ontario Ministry of Natural Resources. 1980 Nipigon Land Use Plan. Pub. Rep.
- Ontario Ministry of Natural Resources. 1984. Fisheries Management Plan 1984. Unpubl. Rep.
- Ontario Ministry of Natural Resources. 1987. Wildlife '87. A chronicle of wildlife conservation in Ontario. Pub. Rep.
- Ontario Ministry of Natural Resources 1989. Ontario Sport Fishing Regulations 1989.
- Ontario Ministry of Natural Resources 1989. Guide to Eating Ontario Sport Fish 1987. 13th Edition Revised. Queens Printer for Ontario.
- Ontario Ministry of Natural Resources 1989. Brook Trout management strategy Nipigon District files.
- Packard, Pearl. 1968. The Reluctant Pioneer. Palm Publishers. Montreal: pp. 232.
- Parker, B.J. 1988. Status of paddlefish, <u>Polyodon spathula</u>, in Canada. Can. Field-Naturalist. 102(2): 291-295.
- Penney, D. 1976. Lake Nipigon Commercial Fish Catch Study, 1976.
 M.N.R., Nipigon District, Unpubl. Rep. 18 pp.
- Penney, D. 1977. Lake Nipigon Commercial Fish Catch Study, 1977. M.N.R., Nipigon District, Unpubl. Rep. 12 pp.
- Perrie, C.E. 1959. Lake Nipigon fishery and the effect of Government withdrawal from the icing plant. Ont. Dept. Lands Forests. Unpubl. Rep.

- Postupalsky, S. 1970. Effects of pesticides on populations of bald eagles and other fish eating birds in the Lake Nipigon and Lake Superior region of Ontario. 29 pp. Unpubl. rep. University of Michigan.
- Ritchie, B.J. 1989. Status of the Lake Nipigon commercial Lake
 Whitefish (Coregonus clupeaformis) fishery and Potential
 Impact of Rainbow Smelt (Osmerus mordax). Lake Nipigon
 Fisheries Assessment Unit, Ontario Ministry of Natural
 Resources, Nipigon Report 1989 2.
- Ritchie, B.J. and J. Black. 1988. Status of the Lake Nipigon brook trout fishery and assessment of potential stresses, 1923 to 1987. Lake Nipigon fisheries Assessment Unit, OMNR, Nipigon, Report 1988 - 1 (MNR #4235).
- Roland, Walpole. 1887. Algoma West, Its Mines, Scenery and Industrial Resources. Warwick and Sons, Toronto.
- Ryder, R.A. 1956. A study of the yellow pickerel population in Lake Superior and the Nipigon River System, 1956. OMNR, Nipigon District, Unpubl. Rep. 26 pp.
- Ryder, R.A. 1968. Dynamics and exploitation of mature walleyes in the Nipigon Bay region of Lake Superior. J. Fish. Res. Board. Can. 25: 1347-1376.
- Scott, W.B. and E.J. Crossman. 1973. Freshwater Fisheries of Canada. Bull. Fish. Res. Bd. Canada 184: 966 pp.
- Sea Lamprey Control centre. 1988. quoted in letter to M.E. MacCallum from R.J. Goold. December 12, 1988.
- Slack, H.W., 1887. Journey up the Nipigon River. From personal diary, 17 pp.
- Stanley, J. 1978. Fragile Things of Beauty. <u>In</u>. Ontario Out of Doors. pp. 14, 22, 23. February 1978.
- Todd, J. 1977. The Nipigon Tramway. In. Canadian Rail. no. 309: 293-312.
- Townes, L.G. 1972. Wildlife and Fisheries East Lake Nipigon Planning Area, Feb. 1972. Unpubl. Rep., Nipigon District.
- Townes, L.G. and J.A. Todd. 1971. The Status of Lake Nipigon Commercial Fishing. Unpubl. Rep., Nipigon District.
- Umfreville, E. 1784. Nipigon to Winnipeg: A Canoe Voyage through Western Canada, p. 12-16. R. Douglas, Ottawa. 1929.

- Vail, Henry H. 1884. Fly Fishing on the Nipigon in Fishing with the Fly. Eds. Charles F. Orvis and A. Nelson Cheney. Charles E. Tuttle co. Pub. Rutland, Vermont. pp. 172-183.
- Van Horne, William. October 19, 1884. Letter to John Ross. <u>In</u> Elizabeth Arthur (ed.) Thunder Bay District, 1821-1892. Univ. of Toronto Press. p. 135.
- Walroth, R, 1979. The Status of Lake Nipigon Commercial Fishery.
 Ontario Ministry of Natural Resources files, Nipigon
 District. 73 pp.
- Waters, T.F. 1987. The Superior North Shore. University of Minnesota Press, Minneapolis. p. 243-260.
- Welch, H.E. 1952. The factors affecting the infection of the Whitefish, <u>Coregonus clupeaformis</u>, by the tapeworm, <u>Triaenophorus crassus</u> in the Thunder Bay District of Ontario. University of Toronto, Masters Thesis, 94 pp.
- Whitcher, W.F. 1888. Nepigon (sic) trout, an Ottawa canoeist's experience on the northern shore of Lake Superior.

 Passenger Department, Canadian Pacific Railway, Montreal. 37 pp.
- Wilson, A.W.G. 1910. Geology of the Nipigon Basin Ontario, Memoir No. 1, Department of Mines, Geological Survey Branch, Ontario.
- Wilson, L. 1991. Nipigon Bay Walleye Historical Review. Dept. of Fisheries and Oceans. Tech. Rep. In press. 94 pp.
- Wright, R.R. 1892. Preliminary report on the fish and fisheries of Ontario. <u>In</u>. Ontario Game and Fish Comm., Commissioners Report.

MAIN LOCATIONS OF REFERENCES

- Ministry of Natural Resources, Nipigon District
 - supplemental reports prepared by M. E. MacCallum
 - district files and reports
 - microfilm of Ontario Department of Game and Fisheries Reports (1899 to 1943)
- Paterson Library, Lakehead University
 - journal articles and books
 - rare books and regional information location in Northern Studies Regional Collection
 - government documents
- Thunder Bay Museum
 - file of information pertaining to Nipigon
- Nipigon Library
 - volume of local history
 - books pertaining to local events and individuals
- Brodie Street Library, Thunder Bay
 - books and articles

APPENDIX 1.

GLACIAL HISTORY OF THE NIPIGON BASIN

Bailey and Smith, 1981

During the last glaciation the entire Great Lakes basin was blanketed with ice. Exposure from the mantle of ice dates only from perhaps 14000 years at the southern edge to some 9000 years in the northern part of the basin. The ichthyofauna in the basin is of relatively recent origin.

The history of the lakes is summarized in the following four stages:

- the periglacial and Algonquin stage 14000-10600 years ago with diverse outlets initially to the south
- 2) the stage of maximum isolation of numerous lakes 10600-8100 years ago with major drainage to the St. Lawrence River
- 3) the broadly connected (approximately Nipissing) stage 8100-6000 years ago, ending with the Nipissing three-outlet state; and
- 4) the modern configuration of the lakes, 6000 years ago to the present.

The periglacial lakes began in the Michigan basin (Lake Chicago) and the Erie and Huron basins (Lake Maumee) as illustrated in Figure 2. As the ice retreated northward and water expanded into more of the Huron basin 13600 years ago, crustal rebound closed the Maumee outlet and the Grand River began to carry waters from the Huron to the Michigan basin (Figure $\tilde{3}$). By 12700 years ago, Lake Agassiz had appeared and a temporary lake (Keweenaw) occupied part of the Superior basin, and precursors of Lakes Huron and Michigan were united as Lake Algonquin. All three of these systems drained to the Mississippi but fluvial connections existed to Lake Erie and to the Ontario basin (Lake Iroquois) as well (Figure 4). At this time Lake Iroquois drained to the Hudson River. Lake Agassiz and Lake Keweenaw (Superior basin) were connected by southeast-flowing rivers 12200 years ago. A readvancement resulted in Valders ice filling the Superior basin and covering most of the Michigan basin 11800 years ago (Figure 5). By 10900 years ago the ice had again retreated and Lake Duluth filled the Superior basin, making it an important biogeographic entity for the first time (Figure 6). Connections existed between Lakes Agassiz and Duluth and lacustrine connections developed between Lake Duluth and the Michigan basin. Lake Duluth drained to the Mississippi. The earliest stages of the Lake Superior basin were higher (elevation of up to 1085' or

331 m) than at any subsequent time and it was during this period that fishes were able to colonize Lake Superior tributaries above their falls. The last phase of the Algonquin stage was the opening, by deglaciation, of the North Bay outlet from northeast Lake Algonquin to the Champlain Sea 11200 years ago, beginning the period of rapid decline in lake levels.

The stage of maximum isolation began 10600 years ago when dropping lake levels separated the Huron, Michigan and western Superior basins except for fluvial connections. Lakes Erie and Ontario were not connected to Lake Algonquin at this time, but drained to the Champlain Sea. The upper lakes drained separately to the Champlain Sea via the North Bay outlet (Figure 7). Ojibway-Barlow formed along the front of receding ice that covered Hudson Bay. Various connections existed between the Superior basin and Lake Agassiz 9500-8700 years ago. Lake Kelvin, in the Nipigon basin, and Lake Nakina, tributary to Lake Kelvin from the east and northeast, provided dispersal routes among the Lakes Ojibway-Barlow, Minong-Houghton (Superior basin) and Agassiz at this time (Figure 8). Potential dispersal routes to and from the Arctic developed along a chain of large lakes that formed as the Laurentide ice sheet receded along a southeast northwest line. Lake Agassiz had at least a brief outlet northwest to the Lake Athabaska area. This chain of lakes was significant for the northward dispersal of many Great Lakes fishes. Maximum separation among the Great Lakes and associated bodies of water occurred 10500-8000 years ago but progressed Eastern and western basins of Lake Superior might have been divided briefly 10600 years ago. Lake Nakina and Lake Kelvin existed to the north of Lake Superior. Lake Kelvin drained to Superior through the Black Sturgeon River 9500 years ago. Lake Nakina afforded the last dispersal route into the Nipigon basin 9000-8700 years ago (Figure 8). Lake Nipigon is now inaccessible from Lake Superior because of barrier falls near the source of the Nipigon River.

The broadly connected (approximately Nipissing) stage 8100-6000 years ago, began when lake levels rose in response to restriction of the North Bay outlet by crustal rebound. The isolation of the previous stage was eliminated. The remnant of Lake Ojibway disappeared and the Tyrell Sea began the transition to Hudson Bay. Lake Agassiz receded to Lake Winnipeg. Lake Huron finally began to discharge again through Lake St. Clair and Lake Erie. Reopening of the Chicago outlet to the Illinois River temporarily permitted the last major dispersal exchange with the Mississippi drainage. The Nipissing Great Lakes three-outlet phase, marks the last of the major dispersal connections of the premodern configuration of the lakes.

The modern configuration of the Great Lakes began 6000 years ago. Cessation of the Chicago and North Bay outlets brought about the modern isolation of the Great Lakes from the Mississippi drainage

and the one way isolation of the upper Great Lakes and Lake Erie from Lake Ontario. The latter isolation was breached in 1825 by the Welland canal. The construction of the canal resulted in new invaders moving into the Great Lakes with significant effects on the fish community.

Biogeographical isolation has resulted in the genetic differentiation of many coregonid stocks, some of which may predate the opening of the Great Lakes in the past 14000 years. The occurrence of genetically distinct forms in Lake Nipigon and Lake Superior suggest that several forms must have colonized prior to 9000 years ago when the last access existed from Lake Superior to Lake Nipigon. At least four and perhaps up to eight forms of the Great Lakes coregonines probably survived the last glaciation south of the ice in proglacial waters at the heads of major river systems.

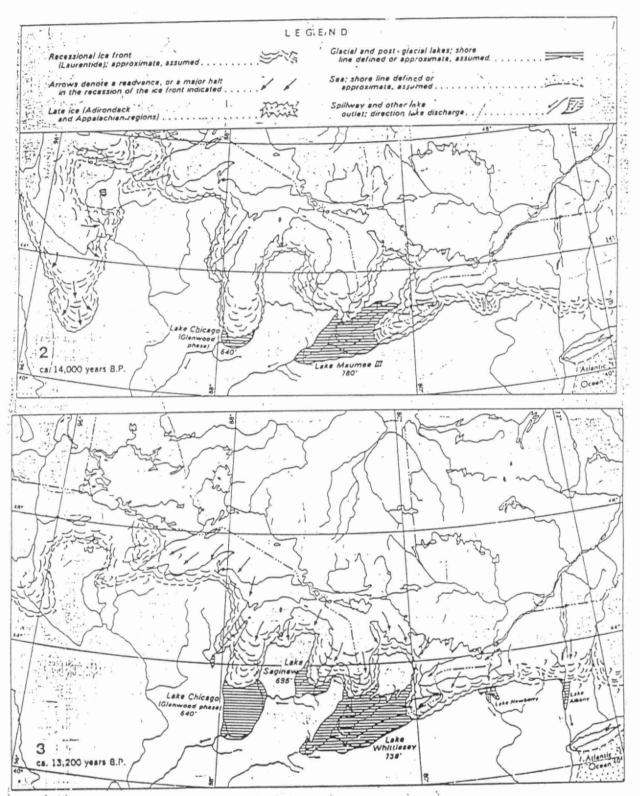


Fig. 2:3. Earliest stages of the Great Lakes 14 000 to 13 200 yr ago, showing drainage to the Mississippi, Susquehanna, and Hudson. (Reprinted with permission, from Prest 1970.)

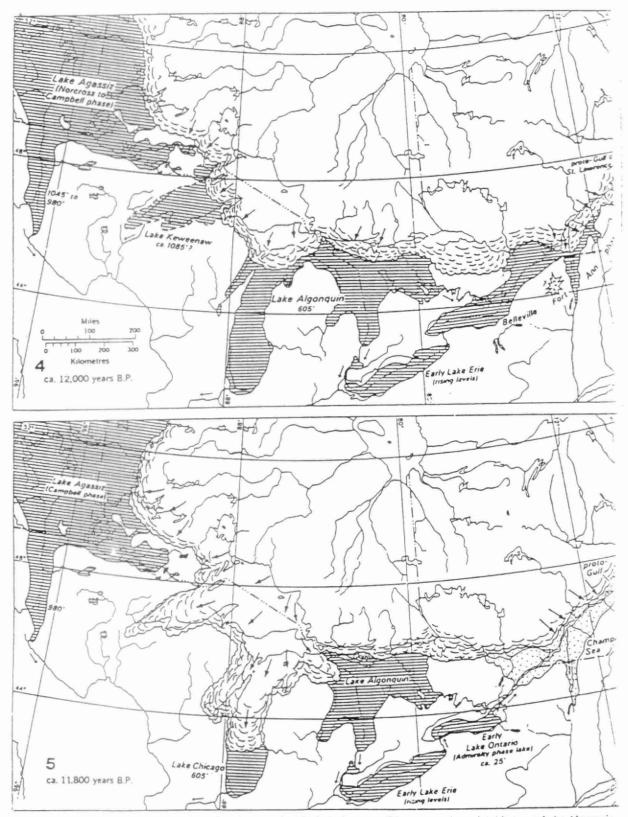


Fig. 4, 5. Development of Lake Agassiz with drainage to the Mississippi system. Direct connection existed between Lake Algonquin the Ontario basin. Lake Kewennaw was eliminated by the Valders advance 11 800 yr ago. (From Prest 1970.)

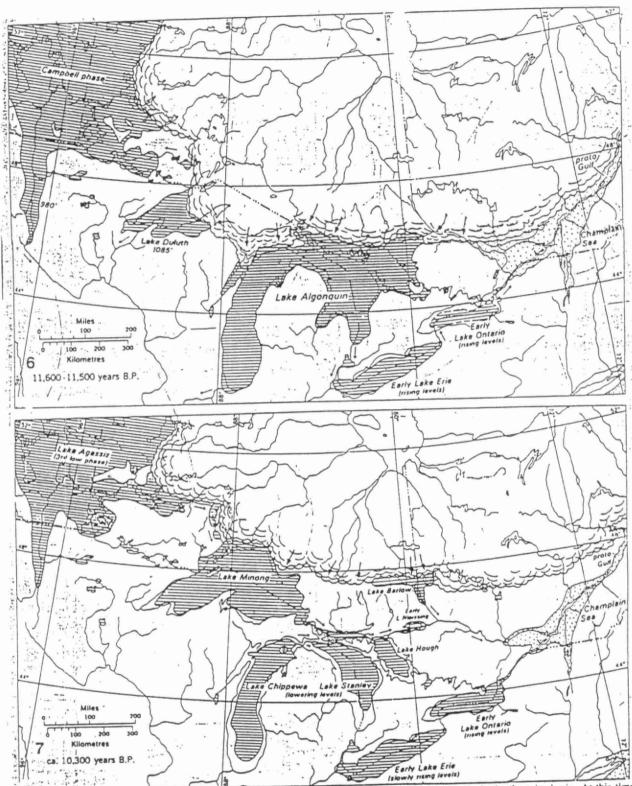
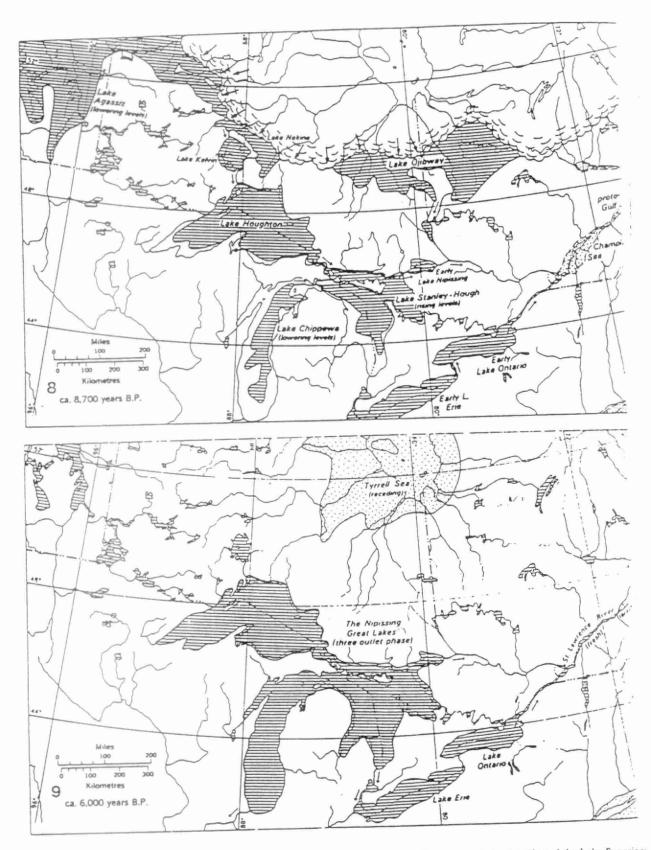


Fig. 6, 7. Lake Duluth, which appeared 11 600 yr ago, was the first zoogeographically significant lake in the Superior basin. At this time connections between Lake Agassiz and the Great Lakes were developing. By 10 300 yr ago crustal rebound was resulting in major separations among the basins. (From Prest 1970.)



APIG. 18, 9. Lakes Nakina and Kelvin, north of Lake Superior, provided major communication between Lake Agassiz and the Lake Superior basin 8700 yr ago. At this time Lake Ojibway was well developed and draining into the North Bay outlet. The Lake Michigan basin was approaching the stage in which northern and southern lakes were briefly separate (8400 yr ago). The Nipissing Great Lakes three-outlet phase provided maximum intercommunication among the lakes. External connection existed from Lake Michigan to the Mississippi. Drainage to the St. Lawrence occurred through the North Bay outlet as well as the lower lakes. (From Prest 1970.)

APPENDIX 2

ARCHAEOLOGICAL HISTORY OF THE NIPIGON AREA

T.F. Waters, 1987

The archaeological record indicates that humans have occupied the shores and river mouths of Lake Nipigon for some 4,000 years.

The earliest known people are those of the late Archaic period and the Shield culture, when copper tools first appeared.

Human populations were fairly stable and continuous around Nipigon, enduring through the Woodland periods, 3,000 years ago to the time of European contact.

Prehistoric Algonquins in the Nipigon Basin, first Cree and later Ojibway, were highly mobile individuals.

They ranged over large areas mainly hunting woodland caribou and fishing for whitefish, sturgeon, lake trout and brook trout.

The Cree were the earliest recorded inhabitants of Lake Nipigon's shores; they occupied the area from Hudson's Bay to Lake Winnipeg.

The Dakota Indians, which occupied the woodlands around the western shores of Lake Superior, also inhabited the western shores of Lake Nipigon.

As the Europeans pressed westward the Ojibway of the St. Mary's River also moved west into the Nipigon basin.

The Nipissings were also forced westward as the Iroquois Indians took over their territory and destroyed their villages.

Many sites around Lake Nipigon have been excavated and studied by K. C. A. Dawson uncovering many artifacts of the early inhabitants and also remnants of fur trade era.

Appendix 3.

As part of the effort to rehabilitate the Nipigon brook trout, MNR has been compiling historical background information about the Nipigon River and Lake Nipigon. A summary of the winning Lake Nipigon and Nipigon River brook trout entries from the Molson Big Fish Contest and some early entries to the Field and Stream Annual Fishing Contest form a portion of this historical information. The domination of these contests by Nipigon Fish are proof of the importance of this area as a world class brook trout fishery. It is notable that there has been a welcome increase in catch & release entries since the opening of this category. This is encouraging and will definitely play a major role in the rehabilitation of the Nipigon River and Lake Nipigon as a major trophy fishery. The following is an impressive list of winners (many of them local) from the top 15 entries each year since 1938.

FIELD & STREAM ANNUAL FISHING CONTEST

LAKE NIPIGON	OPEN DIVIS	SION	
YEAR	WT. (LBS-OZ)	PLACING	NAME
1946	6 lbs 9 oz	7	John E. Ide
41	7 lbs l oz	3.	W. A. McDonald
1947	7 lbs 8 oz	2	Leslie C. Park
**	7 lbs 8 oz	3	Walter Allen Stults
*	7 lbs 8 oz	4	Ronald F. Ginzel
as ·	7 lbs 0 oz	6	F. S. Williams
36	6 lbs 6 oz	9	Mrs Phillip A. Giese
.ee	6 lbs 2 oz	11	T. Angus Dunkin
н	6 lbs 0 oz ;	12	Ralph C. Diggins
1948	7 lbs 12 oz	1	Ralph C. Hitchcock
я.	7 lbs 9 oz	3	F. S. Williams
No.	7 lbs 8 oz	4	D. A. Clark
e	7 lbs 4 oz	6	Dr. Wm. H. Gehl
и.	6 lbs 8 oz	8	Mrs W. H. Bitner
*	6 lbs 8 oz	9	G. F. Weisenbach
*	6 1bs 4.5 oz	11	William T. Morris
**	6 lbs l oz	12	Otto W. Shaw
**	5 lbs 8 oz	14	Arthur Drake
w	5 lbs 8 oz	15	W. D. Randall, Jr.
1950	10 lbs 2 oz	1	Bert Gilmer
ée:	8 lbs l oz	5	Edward S. Reay
10	7 1bs 2 oz	11	George P. Bitner
**	6 lbs 14 oz	15	Walter C. Rattray
	6 lbs 8 oz	19	W. H. Bitner
1951	7 lbs 10.5 oz	6	Wm. Bohonis

FIELD & STREAM ANNUAL FISHING CONTEST

LAKE NIPIGON	OPEN I	DIVISION	
· YEAR	WT. (LBS-OZ)	PLACING	знаи
1952	8 1bs 9 oz	1	Wilfred W. Laine
,	7 lbs 9 oz	3	Alfred Weigler
	7 lbs 6 oz	5	Robert D. Kreisar
	7 lbs 5 oz	6	Fritz G. Weigler Jr.
	7 lbs 4 oz	7	Howard H. Davis
**	7 lbs 3 oz	8	Ralph F. Vogel, Jr.
"	7 1bs 2 oz	9	R. J. Raht
16	7 lbs l oz	10	Fritz G. Weigler, Jr.
1953	9 1bs 4 oz	1	James Warren
"	8 1bs 2 oz	7	Pritz Weigler, Jr.
1954	8 lbs 2 oz	5	Carl L. Macy
	7 1bs 3 oz	9	R. W. Quackenbush
	7 lbs 1 oz	10	Henry P. Sahly
1955	7 lbs 10 oz	4	Paul A. Knowlden
*	7 lbs 6 oz	6	F. A. Meythaler
*	7 lbs 4 oz	7	Roy Meccni
w .	7 lbs 2 oz	8	Robert Kleiser
**	6 lbs 12 oz	9	Thomas P. Moulder
	6 lbs ll cz	10	Earl A. Clason
1956	8 lbs 10 oz	4	John Herdick
	8 1bs 3.5 oz	4	Paul R. Bucklen
**	6 lbs 14 oz	, 10	Mrs Ruth B. Brown
·	7 lbs 9 oz	7	Alfred M. Weigler
w	7 lbs 7 oz	9	Edward H. Getz

FIELD & STREAM ANNUAL FISHING CONTEST

à

FLY CASTING DIVISION LAKE NIPIGON NAME PLACING WT. (LBS-OZ) YEAR Jack Nixon 7 lbs 13 oz 1938 William H. McCollum 6 lbs 14 oz Robert D. Baldwin 8 lbs 5 oz 1939 Jack Nixon 7 lbs 6 oz 1941 Lew E. Scott 7 lbs 4 oz H. A. Lyke 7 lbs 3 oz Alex B. MacKay 6 6 lbs 12 oz William McCollum 6 lbs 8 oz Hiram A. Lyke 9 lbs 6 oz 1942 Vernon S. Orr 7 lbs 11 oz William McCollum 7 lbs 6 oz Wm S. Huddleston 8 1bs 14 oz 1943 T. Jessiman 7 lbs 5 oz W. McCollum 6 lbs 9 oz 1944 George R. Miron 6 lbs 6 oz Dr. W. B. Gnagi, Jr 7 lbs 12 oz 1945 Dr. Henry P. Cossitt 6 lbs 8 oz Wm. Sailor Huddleston 8 lbs 9 oz 1946 Pat Hardwood 8 1bs 2 oz Mark Shipley 3 6 lbs 10 oz George Walcher 6 1bs 7 oz Walter K. Brooks 6 lbs 4 oz 1947 Keith E. Brooks 5 lbs 12 oz W. H. Bitner 7 lbs 4 oz 1948 Charles H. Mullan 8 6 lbs 2 oz W. D. Randall, Jr. 14 4 lbs 4 oz H. L. Price 3 1bs 10 oz Jim Jessiman 6 lbs 10 oz 1949 Leslie Corbett 6 lbs 4 oz 1950 Mark Shipley 6 1bs 12 oz 1951 George E. Lott 8 lbs l oz 1952 W. H. Bitner 7 lbs 8 oz 1955 Alfred M. Weigler 8 1bs 5 oz 1958 Stanley D. Fuller 6 lbs 14 oz

1959

MOLSON BIG FISH CONTEST

LAKE NIPIGON

CATCH & KEEP

YEAR	MT. (LBS-OZ)	PLACING	NAME
1962	7 lbs 7 oz	2	George Baulieu Longlac
1965	7 lbs 0 oz	1	Alfred Childs, Sr. Fort William
-	5 lbs 8 oz	8	Harold Niewiadomy Fort William
*	5 lbs 4 oz	10	Frank Arnold Port Arthur
w	5 lbs 3 oz	12	Paul E. Morrison Port Arthur
	4 lbs 10 oz	15	Tom Trelinski Ft William
1966	5 lbs 13 oz	9	L. B. Woodgate Ft. William
1967	5 lbs 3 oz	14	Oscar Stasiuk Fort William
1968	6 bs 6 oz	7	Len Woodgate Fort William
*	6 lbs 4.5 oz	10	Alex Frazer Nipigon
1970	6 lbs 2 0z	8	Kenton M. Klean Des Moines, Ia
1971	7 lbs 7 oz	2	George Baulieu Longlac
1972	4 1bs 10.5 oz	13	John A. Petroff Capreol
1973	6 lbs 3 oz	6	John Weilbrenner Thunder Bay, Ont
1973	6 lbs 3 oz	3	Sylvester Ray Nipigon, Ontario
1977	8 lbs 6 oz ,	1	Sam deMarchi Hamilton, Ont
1977	6 lbs 15 oz	6	William King, Troy, Ontario
1978	7 lbs 10.75 oz	3	Mary Ann Brown Thunder Bay, Ont
*	6 lbs 6 oz	15	Don Smith Unknown
1979	8 lbs 3 oz	5	F. Ball Kakabeka Falls
	7 lbs 0 oz	12	C. Freamo Thunder Bay, Ont
1981	6 lbs 2.5 oz	11	M. Lunde Madison, Wisc.
	6 lbs 0 oz	13	R. Leonard Lake Geneva, Wisc.
ж	5 lbs 9 oz	15	E. Zapior Thunder Bay, Ont
1982	7 lbs 5.25 oz	6	Christopher Ladd Dodgeville, Wisc
*	6 lbs 6 oz	12	Olga Jalkanen Nipigon, Ont
*	6 lbs 4 oz	13	F. G. Turcotte Thunder Bay, Ont

CATCH & REEP

AMERICA CO.			
YEAR	WT. (LBS-02)	PLACING	NAME
1983	6 lbs 15 oz	3	Kim Schell Beardmore, Ont
	6 lbs 10.5	4	Bert Ordorizzi Webbwood
н	6 lbs 9.5 oz	7	Jeff Ladd Dodgeville, Wisc.
*	6 lbs 3 oz	13	Randy McCart Brampton Ont
196	6 1bs 2 oz	14	Glen Goodman Beardmore, Ont
1984	9.21 lbs	1	Arlin Brynsaas Decorah, Iowa
w	7.5 lbs	8	John Deman Thunder Bay, Ont
	7.43 lbs	11	Ray Goodman Thunder Bay, Ont
и	7.09 lbs	14	Gordon Anderson Rockford, Ill.
1.	7.0 lbs	15	Dick Vasel Martinsburg, PA
1985	7.25 lbs	10	Chuck Sauberlich Rockford, Ill
w	7.18 lbs	11	Richard Cote Beardmore, Ont
et.	7.12 lbs	13	Noel Dutil Nipigon, Ont

MOLSON BIG FISH CONTEST

NIPIGON RIVER	CATCH &	KEEP	
YEAR	WT. (LBS-OZ)	PLACING	NAME
1962	61bs 15 oz	3	Joel Dupuis Nipigon, Ontario
	6 lbs 13.5 oz	4	Dr. J. D. Jenkins Sault Ste. Marie, Ontario
	6 1bs 8 oz	7	Art Jalkanen Nipigon, Ontario
	6 lbs 3.5 oz	10	Dr. J. Vance Hart Sault Ste. Marie
	5 1bs 5 oz	15	E. Chabrak Nipigon, Ontario
1965	5 lbs 11.5 oz	6	J. C. Armstrong Cameron Falls, Ont
1966	7 lbs 2 oz	4	E. Chabrak Nipigon, Ontario
1967	7 lbs 4.5 oz	2	Geary Hill Cameron Falls, Ont
1968	5 lbs 15.5 oz	11	Robert J. Reinert Milwaukee, Wisc.
*	6 lbs 8.5 oz	5.	J. W. Meeks West Virginia
•	8 1bs 8.25 oz	6	Mrs Olga Jalkanen Nipigon, Ontario
1969	6 lbs 7 oz	3	Don Colborne Nipigon, Ontario
1971 •	6 lbs 13.5 oz	4	Dr. J. D. Jenkins Sault Ste. Marie
1971	5 lbs 5 oz	15	E. Chabrak Nipigon, Ontario
*	6 lbs 3.5 oz	10	Dr. J. Vance Hart Sault Ste. Marie
•	6 lbs 8 oz	7	Art Jalkanen Nipigon, Ontario
	6 lbs 15 oz	3	Joel Dupuis Nipigon, Ontario
1972	4 lbs 8 oz	14	Kenneth Temple Circleville, Ohio
*	6 lbs 0 oz	8	Harold Baron Thunder Bay, Ont
	6 lbs 12 oz	4	Lawrence Berube Nipigon, Ontario
1973	5 lbs 11 oz	10	Lorne Allard Thunder Bay, Ont
*	6 lbs 12 oz	5	Ray Polinsky Thunder Bay, Ont
**	7 lbs 5 oz	3	John Weilbrenner Thunder Bay, Ont
1974	6 1bs 9 oz	5	David Knisley Barrie, Ontario
1975	5 lbs 15 oz	6	H. A. Lumsden Nipigon, Ontario
•	6 lbs 15 oz	3	Ernie Benson Nipigon, Ontario
1976	6 lbs 7 oz	6	Art Jalkanen Nipigon, Ontario
	1.50		

NIPIGON RIVER

CATCH & KEEP

MILIOUM NICES			
YEAR	WT (LBS-OZ)	PLACING	NAME
1976	8 1bs 2 oz	2	Harry Smutylo Nipigon, Ontario
1977	6 lbs 9.5 oz	7	Patrick Morley Hamilton, Ont
w	7 lbs 5 oz	5	Dallas Morley Charlestown, W. V
*	7 lbs 9.75 oz	2,	J. Hastle Thunder Bay, Ont
1978	6 lbs 8 oz	4	George Kahan Thunder Bay, Ont
*	7 lbs 3.5 oz	7	Dick Fakka Thunder Bay, Ont
	7 lbs 6 oz	5	Randy Logan Ottawa, Ontario
ж	7 lbs 6.5 oz	4	Ronald Kazmar Trenton, Mich
*	8 lbs 7 oz	1	Lloyd Gauley Red Rock, Ont
1979	6 lbs 8 oz	14	P. Mandich Avon Lake, Ohio
,	7 lbs 4 oz	10	J. Skabar Nipigon, Ont
*	7 lbs 5 oz	9	F. Traintinger Nipigon, Ont
*	7 lbs 10 oz	8	B. Clarke Ottawa, Ont
	7 lbs 12 oz	7	H. Smutylo Nipigon, Ont
	7 lbs 13 oz	6	G. Iwanec Thunder Bay, Ont
1980	8 1bs 6 oz	1	R. Dupuis Jr. Niplegon, Ont
	7 lbs 15 oz	5	H. Smutylo Nipigon, Ont
×	7 lbs 14.5 oz	6	J. McCluskey Nipigon, Ont
*	7 lbs 3.5 oz	10	H. Sauermann Nipigon, Ontario
*	6 lbs 6 oz	12	H. Smutylo Nipigon, Ontario
*	6 lbs 1 oz	15	W. Rohr Nipigon, Ont
1981	7 lbs 14 oz	2	G. Boudreau Red Rock, Ont
*	6 lbs 1 oz	12	R. Grogan Nipigon, Ont
1982	9 lbs 0 oz	1	Ed McCluskey Nipigon, Ont
*	7 lbs 7 oz	5	Milan Raycevich Red Rock, Ont
1983	6 lbs 9 oz	8	Dale Anderson Nipigon, Ontario
1984	7.26 lbs	12	Stephen Webster Scarborough, Ont
1985	8.31 *	3	David L. Derringer Baldwin, Wisc.
*	7.93 *	6	Andrew Atchison Beardmore, Ont
1986	6.75 *	13	Perry Vis Red Rock, Ont

CATCH AND RELEASE

YEAR	FORE LENGTH (in)	GIRTH (in)	PLACING	NAME
1984	20.5	12.12	4	Ray Dupuis Jr. Nipigon, Ont
	20.12	12.0	5	Ray Dupuis Jr. Nipigon, Ont
1985	23.0	14.0	1	Ray Dupuis Sr. Nipigon, Ont
*	23.0	14.0	2	F. Traintinger Nipigon, Ont
*	22.5	11.0	4	Ray Dupuis Sr. Nipigon, Ont
	22.25	13.25	5	Ray Dupuis Jr. Nipigon, Ont
*	20.75	13.25	7	K. Pristanski Nipigon, Ont
* *	21.0	13.0	10	F. Traintinger Nipigon, Ont
*	21.0	12.5	11	Joel Dupuis Nipigon, Ont
**	19.0	.11.0	14	F. Traintinger Nipigon, Ont
1986	25.0	16.0	1	Don Klatt Sardis, B.C
*	23.75	14.5	2	Ray Dupuis Jr. Nipigon, Ont
	22.25	13.75	3	H H
	22.0	13.5	6	
*	21.75	13.25	7	
*	21.5	12.0	10	
*	20.5	12.0	11	" "
*	18.75	11.0	12	Jack Hamilton Nipigon, Ont
LAKE NI	PIGON:	CATCH AND REL	EASE	500 F C 7
YEAR	FORK LENGTH (in)	, GIRTH (in)	PLACING	NAME
1984	24.25	14.25	1	Kurt Pristanski Thunder Bay, Ont
*	23.25	14.0	2	Ray Dupuis Sr. Nipigon, Ont
1985	22.5	13.0	6	Joel Dupuis Nipigon, Ont
*	21.5	12.75	8	Tim Harper Nipigon, Ont
	20.5	13.37	9	Joel Dupuis Nipigon, Ont
1986	18.0	9.75	14	Kurt Pristanski Nipigon, Ont
1987	22.5	13.0	3	Jack Hamilton Nipigon, Ont
* .	21.25	12.25	6	F. Traintinger Nipigon, Ont
	21.25	11.5	8	Manfred Rohr Thunder Bay, Ont
	21.0	11.5	9	G. Boudreau Red Rock, Ont
	18.75	10.75	15	Jack Hamilton Nipigon, Ont

MOLSON BIG FISH CONTEST CATCH & RELEASE

LAKE NIPIGON

YEAR	F.L.	GIRTH	PLACING	NAME
1988	25.00	15.50	1	Stephen Sauer Thunder Bay, Ont.
н	23.75	13.50	2	Jack Hamilton Nipigon, Ont.
11	22.50	13.50	3	Notel Dutil Nipigon, Ont.
n	22.00	13.25	4	Jack Hamilton Nipigon, Ont.
п	21.75	12.00	9	Joshua Dupuis Nipigon, Ont.
II .	21.00	12.00	10	Ray Dupuis Sr. Nipigon, Ont.
н	21.00	12.00	11	Pierre Dupuis Nipigon, Ont.
п	20.50	11.50	13	Kurt Pristanski Thunder Bay, Ont.
1989	25.00	16.00	1	Gord Ellis Thunder Bay, Ont.
н	24.50	16.00	2	Eugene Balec Thunder Bay, Ont.
'n	23.00	15.00	4	Eugene Balec Thunder Bay, Ont.
11	22.75	15.00	6	Dan Klatt Nipigon, Ont.
Ħ	22.00	15.50	7	Eugene Balec Thunder Bay, Ont.
н	22.00	14.00	11	Eugene Balec Thunder Bay, Ont.
"	22.25	13.50	13	Pierre Dupuis Nipigon, Ont.
HC.	22.50	13.25	14	Ray Dupuis Nipigon, Ont.

MOLSON BIG FISH CONTEST CATCH & RELEASE

NIPIGON RIVER

YEAR	F.L.	GIRTH	PLACING	NAME
1988	22.00	13.00	5	Blair Greaves Nipigon, Ont.
п	21.00	13.00	7	Eugene Balec Thunder Bay, Ont.
n	20.00	12.00	12	Geoff Coleman Thunder Bay, Ont.
n	20.00	11.25	15	Francis Traintinger Thunder Bay, Ont.
1989	23.50	14.50	8	Mark Mansfield Toronto, Ont.
н	22.25	14.75	10	Dan Klatt Nipigon, Ont.

MOLSON BIG FISH CONTEST CATCH AND KEEP

LAKE NIPIGON

YEAR	WT. (LBSOZ.)	PLACING	NAME	
1989	7.56	14	Dan Odorizzi Manitouwadge,	Ont.

Source: Ritchie and Black, 1988

Appendix 4. Summary of O.M.N.R. brook trout spawn-taking operations on Lake Nipigon, 1923 to present.

		# Eggs Taken			
			Nipigon		
Year	Dates	West Bay South Bay	House	Total	
1923	Oct	-1,728,000-		1,728,000	
	Nov 16	(617)	144 000	(617) 690,000	
1924	Oct.3 -	546,000	144,000 (51)	(236)	
1005	Nov.13	(195) -970,000-	(31)	970,000	
1925	N.A.	(346)	*	(346)	
1926	Oct.2 -	-525,000-	309,000	834,000	
1320	Nov.13	(188)	(110)	(298)	
1927	Oct.2 -	-685,000-		685,000	
	Nov 23	(245)		(245)	
1928	N.A.	-637,000-		637,000 (228)	
	20	(228)		1,116,000	
1929	Sep.30- Nov.12	834,000 282,000 (298) (101)		(339)	
1930	Oct.3 -	894,000 322,000		1,266,000	
1 7 3 0	Nov.10	(319) (115)		(434)	
1931	Sep. 27-	1,930,000 654,000		2,484,000	
	Nov.13	(689) (234)		(923) 2,487,000	
1932	Sep.26-	-2,487,000 - (888)		(888)	
1933	Nov.17 Sep.21-	1,668,000 525,000		2,193,000	
1933	Nov.17	(596) (188)		(784)	
1938	N.A.	250,000		250,000	
		(89)		(89)	
1946	Sep.27-	86,000		86,000 (31)	
	Nov.11	(31)		297,500	
1948	Oct.12- Nov.16	297,500 (106)		(106)	
1953	Oct.21-	110,000		110,000	
1700	Dec.7	(39)		(39)	
1954	Oct.26-	150,000		150,000	
	Nov.9	(54)		(54)	
1975.	N.A.	54,000		54,000 (19)	
	2.1.	(19)	*	41,500	
1976	Oct.14- Oct.25	41,500 (15)		(15)	
1977	Oct.16-	91,000		91,000	
1011	Nov.3	(33)		(33)	
1978	Oct.8 -	92,000		92,000	
	Nov.8	(33)		(33)	
1984	Oct.16-	72,500		72,500 (23)	
	Nov.2	(23)		(23)	

Numbers in brackets = approx. numbers of females stripped (based on 2800 eggs/female)

Appendix 5. Summary of brook trout stocked in Lake Nipigon since 1928. (Sources: Ritchie and Black (1988) and Nipigon District files.

Year	Date	# Stocked	Age	Location
1928		25 000	F	
1930		30 000	· F	West Bay
1934		230 000	F	South & West Bay & Shakespeare
1935		100 000	F	South & West Bay
1946	Nov.	985 '	А	
1950		280 000	F	Windigo Bay
1952		6 000	SA	Sturgeon R.
1956	Oct.	400	A	
1975	June	1 300	A	Sturgeon R.
1976	June	1 000	A	Sturgeon R.
1983	Nov. Dec.	952 4 846	S A A	South Bay Sand River
1984	June Dec.	2 198 2 500	A A	Macoun Island Forgan L.
1986	June May May May May May May Nov.	2 000 580 6 170 52 292 493 1 936	S A A A A A A	West Bay Russell Is. Macdiarmid Blackwater R. Naonan Is. Shakespeare Is. Mungo Point South Bay
1987	Nov.	1 000	A	Forgan L.
1988	Nov. Nov. Nov. Nov.	530 250 342 607 1 893 1 097	M71 M71 M22 M34 M22 M34	Forgan L. Forgan L. Lake Nipigon Lake Nipigon Lake Nipigon Lake Nipigon

Appendix 5. Continued

Year	Date	# Stocked	Age	Location	
1988	Nov. Nov. Nov. Nov. Nov.	469 428 1 549 100 175 100	M46 M46 M22 M46 M34 M46 M34	Lake Nipigon	
1989	Jan. Nov.	544 19 000 900	M58 EEG M34	Forgan Lake Lake Nipigon Lake Nipigon	

F = fingerlings SA = sub-adults A = adults

M = months EEG = eyed eggs

Appendix 6. A Chronological Review of the Stresses Affecting the Fisheries in Nipigon Bay, Lake Superior.

1839

- Hudson's Bay Company fishing on a commercial scale, Red Rock one of the seasonal posts

1877

- five commercial licences on Nipigon Bay

1900

- walleye was considered a coarse fish and it was removed in order to enhance the trout population on the Nipigon R.

1908

- Nipigon River channel was deepened using a dredge to facilitate larger freighter laden with rails

1912

- CNR completed through Nipigon

1920

- Cameron Falls generating station constructed on the Nipigon River.

1923

- log drives began on the Nipigon River (continued until 1973)

1930

- Red Rock kraft mill established as sulphite pulp mill in the late '30's, production 60 tons/day

- walleye the most abundant fish on the river in the 1930's

- Alexander dam completed on the Nipigon River for hydro-electric power generation

1940

- during this decade, DDT was used in aerial spraying for protection against the spruce budworm and as an insecticide in some localized areas until the mid '60's

- smelt present in Nipigon Bay but not yet abundant

1950

- Red Rock mill changed to kraft production, production 390 tons/day
- Pine Portage dam constructed resulting in considerable flooding on Nipigon River

- local residents report excellent walleye fishing in the 1950's

1943

 Ogoki diversion construction increased the water available for power generation on the Nipigon River by 50% (from 8000 to 12000 cubic feet per second)

Appendix 6. Continued.

1950

- smelt population had become abundant in Lake Superior

1955

- old kraft machines were partially converted to semi-chemical sulphite pulp production
- 90 walleye tagged in the lower Nipigon
- 1955 to 1958 abundant number of spawners
- sea lamprey had begun to seriously affect the fish stocks in Lake Superior

1956

- thousands of walleye noted in the lower Nipigon during May 1000 tagged

1957

- estimated walleye population in the Nipigon R. spring spawning run to be 22,000 individuals; the fall estimate in Nipigon Bay was 41,000

1958

a bleach plant and chemical recovery unit was added to the mill
 during 1955-58, 2200 walleye were tagged with 397 recaps indicating the possible migration routes and spawning locations

1959

- walleye are common but not abundant enough to provide numbers for tagging in 1959-60
- electrical sea lamprey barrier in operation on the Jackfish River

1960

- 67 tons of suspended solids was discharged into Nipigon Bay per day
- lampricide use began in the Nipigon area

1961

- tainting of commercial fish, whitefish caught in Nipigon Bay rejected due to objectionable taste
- walleye were scarce on the Nipigon R. spawning grounds

1964

- lower Nipigon river treated with TFM and Bayer 73

1965

- crash of Black Bay walleye population

1966

- study carried out by German (1968) to investigate complaints regarding tainting of fish flesh

Appendix 6. Continued.

1973

- log drives discontinued in the Nipigon area

1975

- compared with peak years the commercial catch of walleyes in Lake Superior is down 88-100%, yellow perch by 34-86% and blue pike by 100% (Schneider and Leach, 1977)

1978

- an attempt to re-introduce walleye began with the deposition of walleye eggs into the Jackfish River

1984

- commercial fishing for walleye was closed in Nipigon Bay - walleye incubation program started at the Red Rock Fish and Game Club

1986

- adult walleye stocking program began in Nipigon Bay

1989

- the Nipigon Bay, the Nipigon River, and the Jackfish River were closed to walleye angling year round to assist rehabilitation efforts

9693600008269